

Medicare Hospital

INFORMATION

Report

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MEDICARE HOSPITAL INFORMATION

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Volume 24

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MICHIGAN

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U.S. Department of Health and Human Services

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Health Care Financing Administration

# STATES BY VOLUME

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# FOREWORD

The mission of the Health Care Financing Administration (HCFA) is to promote the timely delivery of appropriate, quality health care to the nation's aged, disabled, and poor. The agency must also ensure that beneficiaries are aware of the services for which they are eligible, that those services are accessible, and that agency policies and actions promote efficiency and quality within the total health care delivery system.

To that end, the annual release of the Medicare Hospital Information report is a key element in our continuing efforts to improve the effectiveness of medical practice and the quality of care provided to Medicare beneficiaries. It is also an important step in helping beneficiaries make more informed health care decisions.

**The information in this release is not intended as a direct measure of quality of care.** It is best used as a "screening tool"—that is, to identify potential problems for further review and, in consultation with medical staff, to evaluate a hospital's strengths and weaknesses. Thus, we believe that consumers can use this information to ask questions of their physicians, rather than reach judgments about the quality of care in a particular hospital. We also expect this information to be used by hospital administrators, physicians, peer review organizations, State survey and certification agencies, and researchers.

This publication presents information to answer the question "What is the actual mortality rate within a certain period of time for each hospital compared to the rate that would have been predicted, given what we know about the characteristics of the patients admitted?" Our basic approach to analyzing hospital mortality information has remained unchanged for the past five years; however, since the last publication of mortality information in May 1991, we have made some significant changes both in our methodology and in the way we display the results of our analysis. The four principal changes in the 1992 report are:

- A graphic presentation of the predicted and observed mortality rates for most hospitals for "All Causes" for Federal fiscal years 1988-1990 at 30, 90, and 180 days;
- The addition of information on certain variables that we use in computing the predicted mortality rates for each hospital;
- The addition of information on the geographic origin of each hospital's patients; and

- A comparison of the average length of stay in each hospital with the average for the State and Nation.

These refinements should make this information an even more valuable educational tool to help improve the quality of care in hospitals. The changes were reviewed by a panel of outside experts. The methodology used to calculate the observed mortality rate, the predicted mortality rate, and the standard deviation are briefly described in the Technical Information section of the Introduction to this volume and in more detail in the Technical Supplement (Volume 55).

We acknowledge the assistance we have received from the American Hospital Association—not only for providing the information detailing selected hospital characteristics, but also for alerting its members to the importance of this information. We are also grateful to the personnel in each hospital who took the time to review the data thoroughly and to provide us with comments and suggestions. As before, we have published individual hospitals' comments in their respective State volumes. Over the years, these communications have helped to improve and refine the information included in this publication.

HCFA is committed to improving the Medicare Hospital Information report. To that end, we are continuing to work with representatives of hospital, consumer, employer and other organizations to make this annual report as useful as possible for all consumers.

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# INTRODUCTION

The Medicare Hospital Information report contains information on acute care hospitals that treated Medicare patients discharged in Federal fiscal year (FY) 1990 (October 1, 1989—September 30, 1990).

This year's publication set consists of 54 State volumes and a Technical Supplement (Volume 55). There is one volume per State, except that California and Texas have two volumes each, Hawaii is combined with American Samoa and Guam, and Puerto Rico and the Virgin Islands are combined together in one volume.

Each hospital's two summary data pages are arranged alphabetically by hospital name in each State volume. These data pages consist of:

- The hospital's FY 1990 Medicare hospital mortality rates;
- A graphic presentation of the predicted and observed mortality rates for most hospitals for "All Causes" for FYs 1988—1990 at 30, 90, and 180 days;
- The FY 1990 values for selected explanatory factors used to predict the mortality rates;
- Origins and lengths of stays of Medicare admissions; and
- Hospital characteristics, such as the number of beds and other characteristics, which we obtained from data contained in the American Hospital Association's (AHA) 1990 Annual Survey of Hospitals files or, when such information was not available from the AHA file, the Health Care Financing Administration's (HCFA) Online Survey, Certification and Reporting System (OSCAR) file.

*Please note that the information regarding origins and lengths of stays and hospital characteristics are presented strictly for information purposes only. They were not used to calculate the hospital's predicted mortality rates.*

Toward the end of each volume, we include both State and national mortality rates developed by our analysis, as well as the comments we received from individual hospitals.

## DESCRIPTION OF MORTALITY INFORMATION

The mortality rates at a given hospital may reflect, among other factors, the age, sex, diagnoses, and severity of illness of patients admitted to that hospital, as well as the quality of care they received. Factors affecting health and the probability of death vary among the patient populations served by individual hospitals. Consequently, the mortality rates in different patient populations vary considerably.

These latest analyses of the mortality rates associated with Medicare hospitalizations are similar to those carried out in the four prior years. Only one hospitalization for every patient was used. As in last year's analysis, when a patient had multiple hospitalizations during the fiscal year, one stay was selected at random to be analyzed. We believe that the use of the randomly selected admission provides a better representation of a typical hospital admission and permits us to calculate mortality rates more nearly like those the hospital itself would calculate for its patients.

Although we publish data only on deaths which occur within 180 days of admission to the hospital, for purposes of analysis our methodology actually considers deaths which occur any time within 365 days of admission (with the exception that no date of death later than April 1, 1991 is used). This is part of the formula which assesses the long-term risk of mortality. With this approach, information about the early and later results of the hospitalization is provided. This is important because diseases evolve with different time courses, and treatments may have different short- and long-term effects. The choice of at least 180 days allows substantial followup consistent with timely reporting of HCFA data.

We again analyzed the data on a fiscal year, rather than on a calendar year, basis because it allows us to report on recent hospitalizations. Also, new Medicare rules are often instituted on a fiscal year basis.

For each hospital, mortality rates are presented for overall Medicare patient mortality and for eight medical conditions and nine procedures. The information consists of the number of Medicare patients; the observed or actual mortality rate (OBS); the predicted mortality rate (PRED), given the mix of patients; and a standard deviation (SD), a measure of the uncertainty of the predicted rate.

The following information will be helpful when reviewing specific information for any given hospital.

## *Number Of Cases*

This is the number of individual Medicare beneficiaries whose discharge in a fiscal year from the short-term, acute care hospital listed was selected for analysis. The total number of cases randomly selected for each hospital is presented under the category “All Causes.” The eight medical condition and nine surgical procedure categories are subgroupings drawn from the “All Causes” selection. Although a particular patient may appear in only one of the eight medical condition categories, that same patient may also appear in one or more of the nine surgical procedure categories. Similarly, a patient may appear in one or more of the nine surgical procedure categories, even though he or she was not included in any of the eight medical condition categories.

The categories chosen for display represent HCFA's interpretation of the categories judged to be important by various outside advisors including the Institute of Medicine. The listed condition and procedure categories do not cover the reason for admission of all the hospitalized Medicare patients in this study. (The ICD-9-CM codes included in each condition and procedure category appear in Table 1 following this Introduction section.)

These conditions and procedures represent the causes for the hospital admission and/or surgical episodes during that stay; they do not necessarily represent the cause of death. HCFA does not have access to cause of death information.

## *Observed Mortality Rate (OBS)*

The observed mortality rate for each category is the percentage of each acute care hospital's selected Medicare patients who died within 30, 90, or 180 days of the selected admission. This rate does **not** represent the percentage whose death was caused by a particular condition or procedure.

The percentage is rounded to the nearest one-tenth of one percent. Both in-hospital deaths and deaths occurring after discharge but within 30, 90, or 180 days of admission are included. For example, if a hospital had 1,000 patients included in the “All Causes” category and 124 of these patients died within 30 days of the selected admission, the 30-day observed mortality rate would be 12.4 percent; if an additional 17 patients died more than 30 but less than 91 days after admission, the 90-day observed mortality rate would be 14.1 percent; and if an additional 13 patients died more than 90 but less than 181 days after admission, the 180-day observed mortality rate would be 15.4 percent.

It is important to note that the observed mortality rate is cumulative; e.g., the 90-day observed mortality rate includes all deaths which occur within 30 days of admission, as well as those occurring more than 30 and less than 91 days after admission.



### *Predicted Mortality Rate (PRED)*

The predicted mortality rate for each hospital's patients is derived in part by determining, based on national experience, the contribution to the probability of dying associated with various patient characteristics such as:

- Principal diagnosis (grouped into 23 analytical risk categories),
- Age,
- Sex,
- Previous hospital admissions within the prior six months,
- Admission source (e.g., physician reference, skilled nursing facility reference),
- Admission type (e.g., elective or emergency), and
- The presence of up to seven comorbid conditions—cancer, chronic cardiovascular disease, chronic renal disease, chronic liver disease, chronic pulmonary disease, cerebrovascular degeneration, and chronic diabetes. A list of the ICD-9-CM codes defining the comorbid conditions is in Table 2 following this Introduction section.

### *Standard Deviation (SD)*

The standard deviation is a tool to gauge the extent to which the difference between the observed and predicted mortality rate is meaningful. In general, the greater the difference between the two rates, the greater the probability that the difference represents an actual variation from what would be expected in view of the national experience. The less chance that the difference between the PRED and the OBS can be attributed to statistical variability, the more grounds for possible concern about the institution's performance.

Information on how to use the SD to construct prediction intervals for use in assessing the real difference between the OBS and the PRED is included in the Technical Information section of this Introduction. The precision and interpretability of the estimates are weaker when there are no deaths or 50 or fewer cases in a particular category being analyzed. Thus, for these instances, dashes (“---”) are placed in the SD column.



## **OBSERVED MORTALITY RATE AND PREDICTED RANGE FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**

Also in this year's report, we have presented graphs that display the information for most hospitals described above for FYs 1988 and 1989, as well as FY 1990. (In particular, these graphs could not be computed for hospitals that had 50 or fewer cases or no deaths in FYs 1988, 1989, or 1990). In constructing the graphs, we used 2 times the standard deviation to approximate a 95 percent prediction interval. The observed mortality is shown as a dot (•). The predicted mortality is shown at the middle of a range of mortality rates. The bottom of the range is the predicted mortality minus twice the standard deviation, and the top of the range represents the predicted mortality plus twice the standard deviation. The graphs for FY 1988 and FY 1989 are based on new random samples and new computations for this year's report. Thus, the calculations for some hospitals for FY 1988 and FY 1989 may be different from previous releases, because we are including more current data in this year's report.

## **FY 1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

This year's report includes the FY 1990 average at each hospital of many of the explanatory factors used to predict that hospital's mortality rates. This information provides a profile of the patients used in the analysis and should help to identify possible systematic coding errors in the claims data used to calculate the mortality rates. These percentages are derived from the patients included in the sample and should be applied to the total number of cases listed in "All Causes." It is important to note that neither the admission sources/types nor the comorbidities categories are mutually exclusive. For example, a patient could be both "referred by his personal physician" and "admitted for elective procedure." Similarly, a patient could have secondary diagnoses of both cancer and diabetes.

## **INFORMATION SOURCES AND NOTES**

We believe that when the mortality rate information is properly understood and applied, it can be very useful; it can also be misleading if it is interpreted incorrectly. The information simply describes one of several possible outcomes at a hospital—postadmission mortality for Medicare beneficiaries.

Mortality information is not necessarily representative of a hospital's total performance in all aspects of patient care. Individual hospitals may have very good reasons for their rates being higher than the rates predicted by the HCFA model. For example, one hospital might have different death rates than another because its patient mix is not fully accounted for by the model.

Accordingly, we offered each hospital the opportunity to review their specific information and to provide comments to HCFA and the public, and we included those comments that were received timely at the end of this volume. Users should read the discussions about the uses and limitations of the mortality information found on page xiii, as well as any comments a hospital may have provided.

### *Hospitals In The Analysis*

The hospitals included in this analysis are participating in Medicare as short-term, acute care facilities—all have a zero in the third position of their Medicare provider number. All other hospitals—those with something other than a zero in the third position of their provider number, such as rehabilitation facilities or psychiatric institutions—were excluded. This year, as in the past two years, we have also excluded hospices.

In some cases, we have included data for hospitals that closed, changed ownership, or changed management either during or subsequent to FY 1990. Our data included for those institutions reflects the situation as it existed at the time the hospitalizations analyzed occurred.

### *Data Sources*

This report is based primarily on Medicare hospital billing information for Federal fiscal years 1988, 1989, and 1990. While the principal source of the data for the analysis was the HCFA-maintained Medicare Provider Analysis and Review (MEDPAR) file, which contains information about each Medicare hospitalization, some of the information about beneficiaries, such as date of death, was obtained from the Social Security Administration. Hospitals submit bills to HCFA's fiscal intermediaries (which handle claims for the inpatient care provided to Medicare beneficiaries) which, in turn, submit this information to HCFA. The file is updated on a quarterly basis. Our analysis was based on information available following the June 1991 update of the MEDPAR file. It is estimated that by that time (nine months after the close of the fiscal year), 98 percent of all Medicare discharges in FY 1990 are included in the file.

### *Possible Limitations Of The Data*

In any large-scale data base, such as the one dealing with Medicare hospitalizations, there will be gaps or inaccuracies. For example, last year some hospitals had not accurately reported the source or type of admission, and thus erroneous information was included in the analysis for those hospitals. However, the fact that the files contain information on about 10 million hospital admissions to nearly 6,000 hospitals for each year provides some assurance that, for purposes of the statistical analysis conducted here, the information that might be

missing or inaccurate is such a small portion of the total that it would have little effect on the results for national estimates. Nevertheless, it may substantially affect an individual hospital if it were the source of the inaccurate information.

While we feel that the information used in this analysis is thorough and complete, there are a few points to keep in mind as you review the mortality information.

The information used is billing data; it is only as good as the information submitted by hospitals as part of the payment process. Although there is always a possibility that coding errors are included, we assume that, given the link to payment, hospitals have an incentive to submit bills accurately and promptly. We do know, however, that some hospitals submitted incomplete or erroneous data.

For example, following last year's public release of the hospital mortality data, several hospitals wrote to HCFA indicating that they had submitted incorrect data. Furthermore, they stated that if they had given us the correct information, their predicted mortality rates would have been higher than those presented in HCFA's report. Therefore, in this year's report we have annotated those hospitals' data pages with a footnote stating: "This hospital says that it submitted inaccurate data to Medicare and claims that its predicted mortality rate should be higher than that presented above." At this point, however, HCFA cannot confirm the validity of those hospitals' claims. The analysis results might very well be different if the data on which they were based were submitted accurately by those hospitals.

In our previous analysis of mortality data, we discovered that some States had zero admissions from a skilled nursing facility. While some of these problems were corrected on the MEDPAR files used for this analysis, at the time this study was initiated we found empirical evidence that some of the files still contained suspect information. The suspect data were identified by noting those months (date of discharge) and fiscal intermediaries for which the type and source of admission fields appeared to be interchanged. Based on our findings, we reversed these fields to at least partially correct the remaining discrepancies. The following list shows the specific instances for which the fields were reversed for this analysis.

#### TYPE AND SOURCE OF ADMISSION FLIPPED

| <u>FI No.</u> | <u>FI Name</u>         | <u>Dates</u>        |
|---------------|------------------------|---------------------|
| 00030         | Arizona Blue Cross     | 10/01/86 — 12/31/88 |
| 00080         | Maryland Blue Cross/DC | 06/01/87 — 09/30/87 |
| 00190         | Maryland Blue Cross    | 06/22/87 — 12/31/88 |
| 00400         | Texas Blue Cross       | 12/07/87 — 12/31/88 |



## HOW TO USE THIS INFORMATION

There are several key points to remember about the use of this information. **First, it is important to understand that the difference between the hospitals' mortality rates and the predicted rates in the tables in this report may not be a direct measure of the quality of care rendered in the hospitals.**

Second, the usefulness of this information depends upon the accuracy with which mortality rates can be predicted. We do not currently have any direct measurement tool with which we can fully adjust for severity of patient illness differences among hospitals. For instance, two hospitals may have very different death rates for patients admitted for stroke, even after we have adjusted for age, sex, and several other factors. This might happen because one hospital's stroke patients may consist of a significant number who are admitted in a coma (and are thus more likely to die), whereas another hospital's patient population may represent a broader spectrum of patients with cerebrovascular problems, or because these two hospitals, in fact, do provide different levels of quality of care. In addition, other factors affecting the probability of death in a particular case (e.g., family status/support, overall health status of the patient, etc.) are not included in the predictive model because information on them is not readily available.

Nevertheless, we believe that the information presented in this publication is an important contribution to the health care community and should be helpful to a wide range of individuals and organizations including consumers, hospital administrators, physicians, PROs, and researchers.

### *Use By Consumers — Some Key Questions*

Consumers should read carefully the explanations of the uses and limitations of the information. Listed below are some questions that we recommend a consumer think about before choosing a hospital. Please keep in mind that this is not a comprehensive list, but it should serve to illustrate the types of questions that are important to consider.

- Why are the hospital's observed mortality rates for “All Causes” consistently and significantly above the predicted rates for FY 1990?
- Why are the hospital's observed mortality rates for the condition for which I need treatment or the procedure I will undergo consistently and significantly above the predicted rates for FY 1990?
- How does this hospital's pattern of mortality compare with that of other hospitals in the State and Nation?

- Is the number of cases too small to present a satisfactory picture of the hospital?
- Does the hospital treat a large number of cases in the category for which I need treatment?
- Does the hospital treat a large number of patients who have several co-existing illnesses or who otherwise are likely to be “sicker” than average?

### *Other Users Of This Publication*

Among other users of this publication, we expect that the hospital administrator (in consultation with medical staff) will find the information most useful as a screening tool to evaluate a hospital's strengths and weaknesses. We know that some hospitals and their medical staffs, using established and newly emerging quality assessment techniques, are seeking information that will result in improved health care delivery.

### *Outside Assistance In Developing This Publication*

The development and presentation of the Medicare Hospital Information report continues to be an important part of HCFA's responsibilities in the health care community. To make the information as accurate and useful as possible, over the past several years we have discussed the theoretical framework and statistical approach with a number of nationally recognized technical experts in appropriate fields. Based on their recommendations, we believe that the models used in these analyses continue to be reasonable and appropriate.

In the past, we have conducted validation studies of our methodology. In general, these studies have found correlation between poor quality care and hospitals whose observed mortality rates significantly exceed the rates that would have been predicted. However, we have also found that detailed clinical data which more thoroughly characterize the severity of patient's illness, while they do not materially affect results describing the general pattern of mortality, do, in specific instances, alter our assessment of the comparison of the observed to the predicted mortality rates.

The format for presentation, the process for sharing the information with individual hospitals, and the statistical methodology have been discussed at various meetings with leaders of organizations representing Medicare beneficiaries, physicians, and hospitals. Also, we have spent many months reviewing the comments received from the hospitals regarding their patient-specific data for earlier years and our previous mortality information reports. Many suggestions from these sources have been incorporated into this report.

We have carefully investigated comments from individual hospitals on apparent discrepancies or errors generated in previous years. These discrepancies rarely had an effect on a hospital's overall mortality rate. Most of these instances fell into the following two broad categories.

- **Inaccurate Date of Death** — We found that inpatient billing coding errors (e.g., a hospital bill indicating that the patient's status at time of discharge was “expired” when the patient had, in fact, left the hospital alive) created many of these errors. We now have mechanisms in place that allow a continuous update of HCFA's master file, thereby enabling us to make corrections.
- **Discrepant Case Counts** — Our analysis counts only one acute care discharge in a fiscal year; normally, hospitals count each discharge. Thus, a patient admitted three times in a year would count three times for the hospital, but only once for the purpose of analyzing Medicare hospital mortality data presented in this report.



*We believe it is important for consumers of health care to have access to as much information about hospitals as possible when making health care choices. Along with hospital characteristics information, we have added this year information about the origin and length of stay of Medicare admissions. This information is presented for comparative purposes only and was not used in calculating a hospital's predicted mortality rates. These data were not part of the analyses, and any errors or discrepancies in them do not affect the predicted mortality rates.*

## ORIGIN OF MEDICARE ADMISSIONS

Data on the geographic origin of each hospital's patients are presented in this year's report. We obtained from the Health Insurance Master file the State and county of residence for each Medicare beneficiary discharged from a Medicare-certified, acute care hospital during FY 1990. We then compared that information with the location of the hospital to determine the percentage of all discharges where the patient lived within the same city/county as the hospital location, within the State where the hospital is located, or outside the State. The percentages are derived by dividing the number of discharges of beneficiaries in a geographic category by the total number of Medicare discharges from the hospital. Please note that these are percentages of total Medicare discharges, not of the mortality sample alone.

## MEDICARE AVERAGE LENGTH OF STAY

We obtained from the MEDPAR file the total days of care—both Medicare covered and noncovered—and divided that total by the number of discharges from each hospital. Total, rather than covered, days were used because, under the Prospective Payment System (PPS), if a Medicare patient has at least one day of hospital coverage available to him in the current spell of illness, the hospital will be paid the full diagnosis related group (DRG) amount plus any approved outlier amount, regardless of the number of days actually used.

Example: Hospital A had 2,513 Medicare discharges with a total of 24,379 days.

$$\text{Calculation: } \frac{24,379}{2,513} = 9.7 \text{ days}$$

The Medicare average length of stay is 9.7 days.

## HOSPITAL CHARACTERISTICS

As noted previously, we have again included information on selected hospital characteristics such as the number of beds, occupancy rate, ownership, staffing, and specialty services. This information was obtained from the American Hospital Association's (AHA) 1990 Annual Survey of Hospitals, with the exception of the case mix index (CMI), which was derived from HCFA billing data. This file consists of information voluntarily reported by hospitals to the AHA. In instances where AHA data were unavailable, for example for hospitals that did not respond to the AHA survey, we derived the information from HCFA's Online Survey, Certification and Reporting system (OSCAR). The hospital characteristics and the specific special services listed were selected with the concurrence of the AHA as being those most meaningful to the Medicare population. Information on these specific data elements follows.

### *AHA Definitions (except for CMI)*

**Survey and Year** — AHA 1990. Source is the American Hospital Association's 1990 Annual Survey of Hospital files.

### **Profile**

***Total beds (#)*** — Number of beds (including subacute beds), cribs, and pediatric and neonatal bassinets regularly maintained (set up, staffed, and ready for use) for inpatients as of the close of the reporting period; does not include bassinets for normal newborn infants.

***Occupancy rate (percent)*** — Ratio of average daily census to the average number of beds (statistical beds) maintained during the 12-month reporting period. (NOTE: The number of these "statistical beds" may differ from the bed count at the close of the reporting period.)

***Ownership/control*** — State government, local government, district/authority, church, private nonprofit, private for profit, or Federal Government.

***Medicare discharges*** — The total number of inpatient discharges for Medicare patients for those hospitals selected for the mortality calculations, including all discharges for persons with more than one hospitalization during the year. (The mortality data include only one randomly selected discharge for each hospitalized enrollee. Therefore, this figure may reflect more discharges than the actual number of cases randomly selected for the mortality study.)

***Case mix index (CMI)*** — A measure of the overall complexity of the Medicare cases treated by a given hospital compared to the complexity of the national average case mix. The CMI represents the relative costliness of each hospital's mix of cases compared to the national average mix of cases. A CMI of greater than one means that a hospital treats more complex cases than average. A CMI of less than one means that a hospital treats less complex cases than average. The CMI for each hospital is calculated on an annual basis. In this report, the CMI presented for each hospital is calculated based on its discharges in FY 1990.

A hospital's CMI is calculated by multiplying the number of cases in each DRG by the relative weight of that DRG, summing the products, and dividing the sum by the total number of cases for the year. For calculating the FY 1990 CMI, use the DRG relative weights published in the *Federal Register*, Volume 54, Number 169, pages 36468 ff., dated September 1, 1989.

## **Staffing (all AHA counts are as of 9/30/90)**

***Total number of physicians*** — Total active and associate medical staff.

***Percent of physicians who are board-certified specialists*** — Physicians who have passed an examination given by a medical specialty board and have been certified by that board as a specialist.

***Medical residents/interns*** — Full-time equivalent (FTE) medical residents or interns.

***Registered nurses*** — Full-time equivalent (FTE) registered nurses.

***Licensed practical nurses*** — Full-time equivalent (FTE) licensed practical nurses.

## **Specialty Services**

***Burn Unit*** — Provides more intensive care to severely burned patients than the usual acute nursing care provided in medical and surgical units. Beds must be set up and staffed in a unit specifically designated for this service.

***Cardiac Intensive Care*** — Provides patient care of a more specialized nature than the usual medical and surgical care, on the basis of physicians' orders and approved nursing care plans. The unit is staffed with specially trained nursing personnel, and contains monitoring and specialized support or treatment equipment for patients who, because of heart seizure,



open-heart surgery, or other life-threatening conditions, require intensified, comprehensive observation and care. May include myocardial infarction, pulmonary care, and heart transplant units. Beds must be set up and staffed in a unit(s) specifically designated for this service.

***Comprehensive Geriatric*** — Provides diagnostic and evaluation services that determine elderly patients' long-term care needs. It includes the assessment of medical conditions, functional activities, and mental and emotional conditions, and incorporates these into a treatment plan which includes family and financial concerns as well as medical needs.

***Hospice Care*** — A program providing primarily medical relief of pain and support services to terminally ill patients and assistance to their families in adjusting to the patients' illness and death.

***Medical/Surgical Intensive Care*** — Provides nursing care to adult and/or pediatric patients of a more intensive nature than the usual medical, surgical, pediatric, and/or psychiatric care on the basis of physicians' orders and approved nursing care plans. Included are medical-surgical, pediatric, and psychiatric (isolation) units. These units are staffed with specially trained nursing personnel, and contain monitoring and specialized support equipment for patients who, because of shock, trauma, or life-threatening conditions, require intensified, comprehensive observation and care. These units may also include cardiac care when such services are not approved in a distinct cardiac care unit. This category is called "intensive care unit" in OSCAR.

***Organ/Tissue Transplant*** — The hospital has the necessary staff and equipment to perform the surgical removal of a viable human organ or tissue from a donor, either living or deceased, and the surgical grafting of the organ/tissue to a suitably evaluated and prepared patient.

***Other Intensive Care*** — Provides nursing care to adult and/or pediatric patients with a specialized disease or condition of a more intensive nature than the usual medical, surgical, pediatric, and/or psychiatric care on the basis of physicians' orders and approved nursing care plans. Examples reported include oncology or spinal cord injuries. These units are staffed with specially trained nursing personnel and contain monitoring and specialized support equipment appropriate for the patients' specialized conditions.

***Trauma Center*** — Provides emergency and specialized intensive care to critically injured patients.

## Other Specialty/Hospital-Based Services

***Alcohol/Drug*** — Hospital services for the medical care and/or rehabilitative treatment of outpatients whose primary diagnosis is alcoholism or other chemical dependency.

***Rehabilitation*** — A unit having designated beds and providing a comprehensive array of multidisciplinary medical rehabilitation services.

***Psychiatric*** — Care provided to emotionally disturbed, chronically mentally ill, mentally disordered, or other mentally incompetent patients on the basis of physicians' orders and approved nursing care plans. Beds must be set up and staffed in units specifically designated for this service.

***Medicare Swing Beds*** — The hospital is certified by Medicare to provide “swing bed” services; that is, some acute care beds can be used for skilled nursing facility type care in the hospital for Medicare purposes.

## *OSCAR Definitions (except for CMI)*

**Survey and Year** — HCFA, most recent year. Data were derived from the Online Survey, Certification and Reporting System (OSCAR).

## Profile

***Total beds (#)*** — Total number of operational beds eligible for Medicare payment.

***Ownership/control*** — Church; private, nonprofit; other nonprofit; proprietary; Federal Government; State government; local government; and hospital district or authority.

***Case mix index (CMI)*** — See definition shown in AHA “Profile” section.

## Staffing

***Medical residents/interns*** — Full-time equivalent (FTE) medical residents or interns.

***Registered nurses*** — Full-time equivalent (FTE) registered nurses.

***Licensed practical nurses*** — Full-time equivalent (FTE) licensed practical nurses.

## Specialty Services

**NOTE:** There are no specific definitions of specialty services in OSCAR. Characteristics are self-reported by each hospital at initial Medicare certification and recertification, and are generally understood to parallel the explicit AHA definitions (above). The AHA categories “comprehensive geriatric” and “other intensive care” are not available in OSCAR. However, they may be included in the OSCAR category of other specialty services (not shown in table).

**Coronary Care** — See definition shown in AHA “Specialty Services” section.

**Intensive Care Unit** — See definition shown in AHA “Specialty Services” section. These units may also include other intensive care units in OSCAR reporting.

**Organ Transplant** — See definition shown in AHA “Organ/Tissue Transplant” section. May include tissue transplants because there is not a separate field in OSCAR for these services.



# TECHNICAL INFORMATION

## DATA SOURCES

The data analyzed in this report are obtained from the Medicare Provider Analysis and Review (MEDPAR) file for the fiscal years 1987-1990, which contains information on the hospital stays of Medicare beneficiaries. The principal sources of data for this file are the bills (known as HCFA-1450 or UB-82) submitted by the hospitals to HCFA through fiscal intermediaries. The MEDPAR file also contains data about the beneficiaries, such as age, sex, and date of death, which are obtained from the Social Security Administration, the Railroad Retirement Board, or the Office of Personnel Management.

Hospital stays with discharges in fiscal years 1988, 1989, and 1990 were used in these analyses. Hospital stays in 1987 were used only to characterize the prior admissions of the patients in the 1987 cohort. Only acute care hospital stays in short-term (general and specialty) hospitals were selected. These hospitals have a "0" in the third position of their Medicare provider number. Hospital stays in institutions (designated by a "9" in the fourth position of the provider number) and hospital stays in psychiatric units, rehabilitation units, swing-beds and alcohol/drug units (with "special unit codes" of S, T, U and V, respectively, in the third position) were excluded.

## THE MORTALITY MODEL

For each beneficiary in each year one hospitalization was selected at random. Choosing a specific hospitalization is necessary to avoid multiple counting of the same death for that year. Selecting a random hospitalization instead of the first or last in the year produces mortality rates that are more representative of the rates that a hospital might calculate for its patients. Also, the mortality rates based on this random selection process reflect an intermediate position between the rates produced by the alternatives.

The selected hospital stays were analyzed separately by analytical category. The analytical categories were created by grouping ICD-9-CM diagnosis codes that had similar mortality patterns. The procedures for creating the analytical categories and the groups of ICD-9-CM diagnosis codes that defined them are detailed in the Technical Supplement.

The mortality experience of the patients was evaluated as a function of time within 365 days of the admission. The factors included in the mortality model used to evaluate each patient's probabilities of death are given in Table 3. They consist of demographic characteristics (age and sex), major comorbidities (chronic diseases likely to have been present at admission and believed to

complicate management and increase the likelihood of an adverse outcome), prior admissions (grouped into five risk or severity levels) within the 6 months preceding the admission evaluated, admission type (emergent, elective, etc.), and admission source (referral from the physician's office, the nursing facility, etc.). The specific reason for the admission (the principal diagnosis) and the performance of selected surgical procedures were additional factors used in the estimation of the predicted probability of death (see below).

The observed mortality rate for a hospital was calculated by means of the lifetable method ("The LIFETEST Procedure," Chapter 22, SAS User's Guide: Statistics, Version 5 Edition, pages 529-557).

## ANALYTIC TECHNIQUES

A time-to-event or survival model with explanatory or concomitant variables was used to ascertain the influence of the patient characteristics listed above on the probability of death. A feature of such a model is allowance for "right censored" observations. Generally, these are events or outcomes which would have occurred but for some interference that prevents further observation. In the present analysis, "right censoring" occurs when a patient is withdrawn alive from the study April 1, 1991 or at the end of the followup period of 365 days.

The survival function,  $S(t)$ , is one of several equivalent ways of expressing the model. Another form uses the cumulative distribution function or the mortality function

$$F(t) = 1 - S(t).$$

Another useful formulation of these models is the hazard function,  $h(t)$ , also known as the force of mortality or risk function. The hazard is the rate of decrease in the number of survivors relative to the number of survivors at a specific time. Mathematically, the hazard function is

$$h(t) = - \frac{1}{S(t)} \frac{dS(t)}{dt} = - \frac{d \ln(S(t))}{dt}.$$

The probability density function,  $f(t)$ , commonly used in statistical texts can be expressed as follows:

$$f(t) = \frac{dF(t)}{dt} = h(t)S(t).$$

The area under the survival curve is the expected value for  $t$ . In some cases, the area under the survival curve is restricted to an interval  $0-t_1$  where  $t_1$  might be one year, for example.

The specific time-to-event or survival model used in the present analysis is Bailey's modification of the Makeham model. The survival function for the Bailey-Makeham model is

$$S(t) = \exp\left\{-\delta t - \left(\frac{\alpha}{\gamma}\right)(1 - \exp(-\gamma t))\right\}$$

where

$$\alpha = \exp(\alpha_0 + \alpha_1 x_1 + \dots + \alpha_i x_i + \dots + \alpha_k x_k)$$

$$\gamma = \exp(\gamma_0 + \gamma_1 x_1 + \dots + \gamma_i x_i + \dots + \gamma_k x_k)$$

$$\delta = \exp(\delta_0 + \delta_1 x_1 + \dots + \delta_i x_i + \dots + \delta_k x_k)$$

are the expressions for each of the structural parameters  $\alpha$ ,  $\gamma$ , and  $\delta$  in terms of the  $k$  concomitant variables  $x_i$  and their associated component parameters  $\alpha_i$ ,  $\gamma_i$ , and  $\delta_i$  for  $i=1, 2, \dots, k$  and three intercepts or component parameters  $\alpha_0$ ,  $\gamma_0$ , and  $\delta_0$ . The structural parameter  $\delta$  is the long-term risk which is approached as  $t \rightarrow \infty$ . The structural parameter  $\alpha$  is the initial excess risk which decays with rate constant  $\gamma$ .

For the survival function given above, the risk or hazard function has an especially tractable form of an exponential decay which approaches a long-term risk,  $\delta$ . The hazard function corresponding to the survival function above is

$$h(t) = \alpha \exp(-\gamma t) + \delta.$$

The estimation of the component parameters was carried out in a series of steps in which those covariates which had estimable and statistically significant ( $p < 0.05$ ) influences of the probability of death were identified for inclusion in the model. As the model for each of the 23 risk categories was estimated separately, different lists of covariates were used for the final core models.

This first step was followed by the estimation of the additional contribution of specific principal diagnoses in each risk category. In these analyses, the effects of the patient characteristics included in the core models were corrected for. Only those principal diagnoses were retained which were estimable and had more than 900 cases (more than 300 for codes identified by year). Similarly, after adjustment for the effects of both the variables in the core model and the principal diagnoses, correction terms were calculated to estimate the additional information about the probability of death associated with the categorization of the patients into the clinical groups used for the presentation of the data in the mortality tables (see below). These correction terms were negligible for the medical categories but substantial for the surgical categories.



Once the component parameters or regression coefficients  $\alpha_i$ ,  $\gamma_i$ , and  $\delta_i$  have been estimated, the predicted probability of patient death at any specified time after admission,  $1-S(t)$ , may be calculated for all individuals. To obtain the predicted mortality rate up to a given time for a hospital, it is then only necessary to average over the predicted probabilities of death of its patients to that time.

The analytical categories are useful for grouping the patients into relatively risk-homogeneous strata for the regressions. However, to gain insights into patterns of practice at hospitals, the data are presented for patients grouped into clinically meaningful medical and surgical categories. The 17 clinical categories used in the mortality tables and defined in Table 1 were identified by the Institute of Medicine as being of particular medical and epidemiologic interest.

## ESTIMATION OF THE STANDARD DEVIATION FOR PREDICTED MORTALITY

The standard deviation of the predicted mortality rate is used to assess how statistically different the observed mortality rate is from the rate predicted by the national experience with like patients. The standard deviation depends, in fact, on the variance of the residual or the difference between the observed,  $P$ , and predicted,  $\hat{\Theta}$ , mortality rates.

The residual has four components  $V_1$ ,  $V_2$ ,  $V_3$ , and  $V_4$  where  $V_1$  is the variance of the estimate of the predicted probability of death. This computationally intensive term was negligible for nearly all cases, compared to other components of variance. Consequently, this term was not included in the present analysis.

$V_2$  is the binomial variance for  $n$  patients

$$V_2 = \frac{\hat{\Theta} (1 - \hat{\Theta})}{n}.$$

$V_3$  is the variation among hospitals not explained by the mortality regression models containing the patient characteristics described above.

$$V_3 = \widehat{\text{Var}}(\hat{\Theta}) = \left(1 - \frac{1}{n}\right) M_2(\hat{\Theta})$$



where

$$\widehat{M_2(\Theta)} = \left( \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics and} \\ \text{adjustment for hospital effects} \end{array} \right) - \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics,} \\ \text{but omitting the hospital specific effects} \end{array} \right) \right)^2 \left( \frac{1}{z_p^2} \right)$$

The quantity  $z_p$  corresponds to the statistical significance (p-value) of the hospital-specific effect.

$V_4$  is the variation not explained by the mortality regression models which each include, in addition, an indicator variable for the hospital:

$$V_4 = \left( \left( \text{Observed mortality} \right) - \left( \begin{array}{c} \text{Predicted mortality} \\ \text{on basis of} \\ \text{patient characteristics, and} \\ \text{adjustment for the hospital specific effects} \end{array} \right) \right)^2$$

(The regression coefficients of the indicator variable for the hospital are a measure of the influence on the probability of patient death of factors not otherwise specified in the model. These factors include severity of illness not adequately reported on by the patient characteristics deduced from the claims data and the hospital's pattern of practice; i.e., performance.)

The standard deviation given in the mortality tables is just

$$SD = \sqrt{V_2 + V_3 + V_4}.$$

## STANDARDIZED MORTALITY RATIO (SMR)

Another method of evaluating a hospital's performance—the Standardized Mortality Ratio (SMR)—is obtained by dividing the observed mortality rate by the predicted mortality rate. An SMR of one means the observed and predicted mortality are equal. A ratio greater than one means the observed mortality exceeds the predicted. A ratio less than one means the observed mortality is less than expected. The more extreme the ratio (significantly greater than one indicating unusually high mortality and significantly less than one indicating unusually low mortality), the greater the attention which should be paid to the results of this mortality report.

For each of the conditions and procedures, selected percentiles for the observed distribution of the SMR are displayed in Table 4. The selected percentiles provide benchmarks for comparison. For example, for a hospital

with 300 cases in the “All Causes” category, with observed mortality of 12.2 percent and predicted probability of 10.0 percent at 30 days, the standardized mortality ratio is

$$\text{SMR} = 12.2/10.0 = 1.22.$$

Note that an SMR of one means the observed and predicted mortality are equal, while a ratio greater than one means the observed mortality exceeds the predicted, and a ratio less than one means the observed mortality is less than expected. There will be greater interest in the more extreme ratios, either greater than one — excessively high mortality — or less than one — extremely low mortality.

From Table 4 for FY 1990, we find that the ratio is just below the 75th percentile of 1.23. Hence, slightly under 75 percent of the hospitals have an SMR less than that found at this hospital.

However, for a hospital with 900 cases in the “All Causes” category, with observed mortality of 19.3 percent and predicted probability of 10.0 percent at 30 days, the standardized mortality ratio is

$$\text{SMR} = 19.3/10.0 = 1.93.$$

Since the SMR of 1.93 is greater than the 97.5 percentile of 1.35 (Table 4 for 750 or more cases), there is cause for concern. To further assess this, we examine the displayed data in terms of the measure of uncertainty, the standard deviation.

## MEASURES OF UNCERTAINTY

In principle, to use the standard normal approximations to determine prediction intervals, an adjustment must be applied for the skewness and kurtosis inherent in a mortality rate when the rate is considerably less than 50 percent and the number of cases is small. Table 5 presents the multiplicative factors, based on the binomial distribution, for the standard deviation needed to construct prediction intervals for the mortality rates at confidence levels of 75, 95 and 99 percent. Because of the approximations involved in the estimation of the skewness and kurtosis corrections, their precision decreases as the number of cases and the mortality rate decrease; i.e., as the value of the correction increases. In addition, because of simplifications and approximations in the estimation of the standard deviation, the precision of the multiplicative factors given in Table 5 exceeds the precision of the estimate of the standard deviation. Hence, the following rule-of-thumb represents an adequate approximation to the factors in Table 5 and an adequate guide to the **statistical meaningfulness** of the difference between the observed and the predicted mortality rates.

To illustrate the use of Table 5, consider a hospital with 75 cases and a predicted mortality of 13.0 percent with a standard deviation of 5.0 percent. Overall, for hospitals with patients with characteristics similar to those of this hospital, we would expect the actual or observed mortality rate to lie, 95 percent of the time, either between 13.0 percent and 22.9 percent if the actual is larger than the predicted, or between 3.3 percent and 13.0 percent if the actual is less than the predicted. That is because  $22.9 \text{ percent} = 13.0 \text{ percent} + 1.98 \times 5.0 \text{ percent}$ , the factor 1.98 having been read from the section of Table 5 with the heading "95 Percent Prediction Interval" and "Factor for Upper Bound," the row "75" for the number of cases, and, by interpolation, between the "10 percent" and the "20 percent" predicted mortality rate columns. Similarly,  $3.3 \text{ percent} = 13.0 \text{ percent} - 1.94 \times 5.0 \text{ percent}$ , the factor -1.94 having been read from the section of Table 5 with the heading "95 Percent Prediction Interval" and "Factor for Lower Bound" and the corresponding row and columns.

Therefore, in comparing the actual and predicted rates, more attention should be given to the hospital whose observed mortality rate lies beyond the bounds calculated for the 99 percent prediction interval than to the hospital whose observed mortality rate lies only beyond the bounds calculated for the 95 percent prediction interval. Likewise, more attention should be given to that hospital than to the hospital whose observed mortality rate lies only beyond the bounds calculated for the 75 percent prediction interval.

For the graphs, the observed mortality and an approximate 95 percent prediction interval are displayed. The prediction interval has bounds at the predicted mortality plus 2 times the standard deviation and at the predicted minus 2 times the standard deviation.

In the mortality rate tables, the observed and predicted mortality rates and the standard deviation as a measure for statistical importance of the difference are displayed for the overall and each of the conditions and procedures.



## HOW TO OBTAIN MEDICARE HOSPITAL INFORMATION

The publication has been widely distributed to State health organizations and hospital and medical associations. The publication is available to the public for purchase in 55 volumes, with each volume being sold separately through the Government Printing Office (GPO). More detailed information about the purchase of this publication may be obtained by contacting:

Superintendent of Documents  
Government Printing Office  
Washington, D.C. 20402  
Telephone: (202) 783-3238

As in prior years, the information appearing in the Medicare Hospital Information report is available in machine-readable/electronic format (tape and diskette). The Medicare Hospital Information public use file provides the published information as contained in the 55-volume hardcopy publication, except that the AHA's hospital characteristics are not on this file. Hospital characteristics from HCFA files (OSCAR) are provided instead. The files contain additional information which is useful for supplemental analyses: averages by hospital, MSA, and State for each of the variables used in the model, mortality rates for 15, 30, 60, 90 and 180 days, and cross-reference files which relate State, MSA, and ICD-9-CM codes used to a name. These data should allow analysts to assess an individual hospital's performance in comparison to all hospitals in the State or applicable MSA.

Also available to hospitals in machine-readable format is their patient-specific data that were used in the report. These data include the patient variables used in the analysis (e.g., the number and severity level of prior hospitalizations considered by the methodology, admission source and type, etc.) and the predicted probability of death at each time interval for each individual included in the study. With these data it is possible for hospitals to better understand their statistics. **Due to confidentiality considerations, requests for patient-specific data must be forwarded on hospital letterhead, must include the institution's Medicare provider number, and must be signed by the hospital administrator.**

For information about obtaining Medicare Hospital Information electronic media data, please contact HCFA's Bureau of Data Management and Strategy at:

Health Care Financing Administration  
Bureau of Data Management and Strategy  
Office of Statistics and Data Management  
3-A-10 Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207  
Telephone: (410) 597-5151



# Table 1

## DIAGNOSTIC AND PROCEDURE CATEGORIES

The following lists the ICD-9-CM diagnostic and procedure codes used to classify and group patients for presentation

### CONDITION/PROCEDURE

### ICD-9-CM CODES

(D)=Diagnosis code

(P)=Procedure code

#### Heart Disorders/Procedures

Acute Myocardial Infarction  
(AMI)

All of 410 (D) (on 10/1/89 exclude 410 with 5th digit of a 2)

*Note: For code 410 a 5th digit was added on October 1, 1989.*

Congestive Heart Failure  
(CHF)

398.91, 402.01, 402.11, 402.91, 428.0, 428.1, 428.9 (all D)

Angioplasty  
(ANGPLSTY)

All of 36.0 (P) excluding 36.00, 36.03, 36.04, 36.09 (all P)

*Note: Code 36.0 had a 4th digit added on October 1, 1986. Code 36.0 got digits of 0, 1, 2, 3, and 9, and code 36.04 got some previously coded cases of 39.97. On October 1, 1987, code 36.01 was divided into 36.01 and 36.05, and some cases from 36.02 were put into 36.05.*

Coronary Artery Bypass Graft  
(CABG)

All of 36.1(P) and not Angioplasty (see above)

Pacemaker Insertion, Initial  
(PACE)

37.73, 37.74, 37.75, 37.77 (after 10/1/87 use 37.70 through 37.73) (all P)

*Note: Code 37.70 was restructured on October 1, 1987. Previously the code contained both leads and devices. On October 1 these were separated and devices were coded as 37.80 through 37.83, and codes for the leads were changed into various 37.70 codes.*

**CONDITION/PROCEDURE****ICD-9-CM CODES***(D)=Diagnosis code**(P)=Procedure code***Pulmonary Disorders****Pneumonia/Influenza  
(PNU)**All of 480, all of 481, 482.2, 482.3,  
482.9, 483, 485, 486, 487.0 (all D)**Chronic Obstructive Pulmonary  
(COPD)**All of 491, all of 492, all of 494, Disease  
all of 496; and 466.0, 518.82, 518.5,  
and 786.09 when there is a secondary  
diagnosis of any 496 (all D)

*Note: Code 518.8 got a 5th digit on October 1, 1987. Some  
cases from 799.1 were put into codes 518.81 and  
518.82.*

**Cerebrovascular Disorders/Procedures****Transient Cerebral Ischemia  
(TCI)**433.1, 433.3, 435 (D) and exclude those  
patients with an endarterectomy at the  
time of admission—38.12(P)**Stroke  
(STK)**

431, 434 through 434.9, 436 (all D)

**Carotid Endarterectomy  
(ENDART)**38.12 (P) with 433.1 (D); 433.3 (D) or  
435(D) as a principal diagnosis**Musculoskeletal Disorders/Procedures****Fracture of Neck of Femur  
(FXHIP)**

All of 820 (D)

**Hip Replacement/Revision  
(HIPREP)**81.5, 81.6 (exclude 81.69) (all P). On  
10/1/89 code 81.51 (P) through 81.53  
(P) with same diagnoses.**Open Reduction of Fractured Femur  
(OPRDUX)**79.35(P) on condition of 820 (D) as  
principal diagnosis

**CONDITION/PROCEDURE****ICD-9-CM CODES***(D)=Diagnosis code**(P)=Procedure code***Genitourinary Disorders/Procedures**

Prostatectomy  
(PROS) 60.2, 60.3 through 60.69 (all P)

Hysterectomy  
(HYS) 68.3 through 68.7 (P)

**Gastrointestinal Disorders/Procedures**

Cholecystectomy  
(CHOLOTMY) 51.22 (P)

**Sepsis**

Sepsis 003.1, 020.2, 022.3, 036.2, 036.3,  
036.89, 036.9, 038.0, 038.1, 038.2,  
038.3, 038.40, 038.41, 038.42, 038.43,  
038.44, 038.49, 038.8, 038.9, 054.5

**Table 2**  
**COMORBIDITY CONDITIONS**  
(all are D codes)

| COMORBIDITY                    | ICD-9-CM CODES                                                                                   |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| Cancer                         | 141-160.9, 162-172.9, 174-208.91                                                                 |
| Chronic cardiovascular disease | 412-414.9, 426-429.1                                                                             |
| Chronic liver disease          | 571-572.8                                                                                        |
| Chronic renal disease          | 582-583.9, 585-587, 403.01, 403.11,<br>403.91, 404.02, 404.03, 404.12, 404.13,<br>404.92, 404.93 |
| Chronic diabetes               | 250.01, 250.1-250.91                                                                             |
| Chronic pulmonary disease      | 491-493.91, 496                                                                                  |
| Cerebrovascular degeneration   | 290-290.9, 294-299.9                                                                             |



# Table 3

## EXPLANATORY VARIABLES FOR THE MORTALITY MODEL

Generally the same variables are used for all diagnostic categories.

### Demographics

SXFM                      An indicator variable: = 1 if Female, 0 otherwise

AGEFM = AGESP if SXFM = 1, 0 otherwise

AGEML = AGESP if SXFM = 0, 0 otherwise

where

$$AGESP = \text{sign}(W-65) \left( \left| \frac{W-65}{65} \right| \right)^{1.44}$$

and

$$W = \begin{cases} 23 & \text{if AGE} \leq 23 \\ \text{AGE} & \text{if } 23 < \text{AGE} < 100 \\ 100 & \text{if } 100 \leq \text{AGE} \end{cases}$$

### Comorbidities

### ICD-9-CM Codes

(Indicator variables = 1 if comorbidity present on current or prior admission with discharge within 6 months prior to current admission, 0 otherwise)

|     |                                |                                                                                            |
|-----|--------------------------------|--------------------------------------------------------------------------------------------|
| CCA | Cancer                         | 141-160.9, 162-172.9, 174-208.91                                                           |
| CCV | Chronic cardiovascular disease | 412-414.9, 426-429.1                                                                       |
| CLV | Chronic liver disease          | 571-572.8                                                                                  |
| CRN | Chronic renal disease          | 582-583.9, 585-587, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93 |
| CDI | Chronic diabetes               | 250.01, 250.1-250.91                                                                       |
| COP | Chronic pulmonary disease      | 491-493.91, 496                                                                            |
| CCE | Cerebrovascular degeneration   | 290-290.9, 294-299.9                                                                       |

## Co Occurrence of Comorbidities

|         |                                       |
|---------|---------------------------------------|
| COP_CCV | 1 if COP = 1 and CCV = 1, 0 otherwise |
| CCA_CCV | 1 if CCA = 1 and CCV = 1, 0 otherwise |
| COP_CCA | 1 if COP = 1 and CCA = 1, 0 otherwise |
| CCE_CCV | 1 if CCE = 1 and CCV = 1, 0 otherwise |
| CRN_CCV | 1 if CRN = 1 and CCV = 1, 0 otherwise |

## Admission Sources and Types

(Indicator variables = 1 if source or type present, 0 otherwise)

|       |                                                   |
|-------|---------------------------------------------------|
| PREF  | Patient referred by personal or HMO physician     |
| TRSNF | Patient transferred from skilled nursing facility |
| ELCT  | Patient admitted for elective procedure           |
| EMRG  | Patient admitted for emergency                    |

## Co-Occurrence of Admission Source and Type

PREF\_ELEC = 1 if PREF = 1 and ELCT = 1, 0 otherwise

## Previous Hospitalizations

|         |                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------|
| P_RISK1 | Number at 1st risk level with 3 or more set to 3                                                            |
| P_RISK2 | Number at 2nd risk level with 3 or more set to 3                                                            |
| P_RISK3 | Number at 3rd risk level with 3 or more set to 3                                                            |
| P_RISK4 | Number at 4th risk level with 4 or more set to 4                                                            |
| P_RISK5 | Number at 5th risk level with 3 or more set to 3                                                            |
| F(T)    | Probability of death from previous admission if discharge within 182 days of current admission, 0 otherwise |

## Time Trend

|        |                                                                                   |
|--------|-----------------------------------------------------------------------------------|
| FLAG89 | 1 if discharge in FY1989, 0 otherwise                                             |
| FLAG90 | 1 if discharge in FY1990, 0 otherwise                                             |
| INYEAR | Difference between current admission date and April 1 of fiscal year of discharge |

TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1990

| CONDITIONS/PROCEDURES    | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |      |      |      |       | 90 DAYS |      |      |      |       | 180 DAYS |      |      |      |       |
|--------------------------|---------------------------|---------|------|------|------|-------|---------|------|------|------|-------|----------|------|------|------|-------|
|                          |                           | -----   |      |      |      |       | -----   |      |      |      |       | -----    |      |      |      |       |
|                          |                           | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%     | 25%  | 50%  | 75%  | 97.5% |
| OVERALL( < 750 CASES )   | 2645                      | 0.45    | 0.88 | 1.04 | 1.23 | 1.72  | 0.56    | 0.90 | 1.03 | 1.17 | 1.54  | 0.61     | 0.90 | 1.02 | 1.15 | 1.46  |
| OVERALL( >= 750 CASES)   | 2684                      | 0.73    | 0.91 | 0.99 | 1.09 | 1.35  | 0.79    | 0.94 | 1.01 | 1.09 | 1.28  | 0.82     | 0.94 | 1.01 | 1.08 | 1.24  |
| CONDITIONS               |                           | -----   |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| AMI                      | 1405                      | 0.54    | 0.80 | 0.95 | 1.11 | 1.42  | 0.62    | 0.86 | 0.99 | 1.14 | 1.44  | 0.63     | 0.86 | 0.99 | 1.13 | 1.39  |
| CHF                      | 2335                      | 0.43    | 0.79 | 0.98 | 1.17 | 1.64  | 0.60    | 0.85 | 0.99 | 1.13 | 1.49  | 0.66     | 0.89 | 1.00 | 1.13 | 1.41  |
| PNEUMONIA/INFLUENZA      | 2428                      | 0.41    | 0.78 | 0.97 | 1.18 | 1.68  | 0.53    | 0.84 | 1.00 | 1.17 | 1.55  | 0.57     | 0.86 | 1.01 | 1.16 | 1.50  |
| COPD                     | 435                       | 0.00    | 0.63 | 0.97 | 1.34 | 2.06  | 0.30    | 0.78 | 1.02 | 1.26 | 1.74  | 0.40     | 0.82 | 1.01 | 1.24 | 1.69  |
| TRANS. CEREBRAL ISCHEMIA | 404                       | 0.00    | 0.00 | 0.83 | 1.34 | 3.20  | 0.00    | 0.48 | 0.85 | 1.31 | 2.27  | 0.21     | 0.60 | 0.90 | 1.21 | 2.05  |
| STROKE                   | 1789                      | 0.53    | 0.79 | 0.95 | 1.13 | 1.56  | 0.61    | 0.84 | 0.98 | 1.13 | 1.47  | 0.65     | 0.87 | 0.99 | 1.12 | 1.42  |
| HIP FRACTURE             | 1199                      | 0.21    | 0.67 | 0.93 | 1.27 | 2.10  | 0.40    | 0.76 | 0.94 | 1.19 | 1.80  | 0.47     | 0.78 | 0.97 | 1.16 | 1.64  |
| SEPSIS                   | 254                       | 0.51    | 0.79 | 0.96 | 1.12 | 1.50  | 0.65    | 0.86 | 0.99 | 1.13 | 1.47  | 0.69     | 0.89 | 1.01 | 1.15 | 1.44  |
| PROCEDURES               |                           | -----   |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| ANGIOPLASTY              | 425                       | 0.00    | 0.49 | 0.89 | 1.33 | 2.66  | 0.00    | 0.60 | 0.93 | 1.36 | 2.34  | 0.00     | 0.63 | 0.97 | 1.34 | 2.14  |
| CABG                     | 556                       | 0.20    | 0.68 | 1.03 | 1.39 | 2.45  | 0.28    | 0.73 | 1.00 | 1.32 | 2.09  | 0.28     | 0.73 | 1.01 | 1.30 | 2.10  |
| PACEMAKER                | 112                       | 0.00    | 0.41 | 0.72 | 1.37 | 3.25  | 0.20    | 0.61 | 0.90 | 1.21 | 2.17  | 0.21     | 0.65 | 0.84 | 1.16 | 1.87  |
| CAROTID ENDARTERECTOMY   | 73                        | 0.00    | 0.00 | 0.85 | 1.33 | 2.90  | 0.00    | 0.14 | 0.74 | 1.28 | 2.43  | 0.00     | 0.42 | 0.86 | 1.38 | 2.86  |
| HIP REPLACEMENT          | 763                       | 0.00    | 0.53 | 0.94 | 1.44 | 2.77  | 0.19    | 0.67 | 0.96 | 1.31 | 2.12  | 0.26     | 0.71 | 0.94 | 1.26 | 1.91  |
| REDUCT. OF HIP FRACTURE  | 276                       | 0.00    | 0.56 | 0.86 | 1.22 | 2.05  | 0.31    | 0.68 | 0.92 | 1.19 | 1.76  | 0.38     | 0.77 | 0.96 | 1.12 | 1.58  |
| PROSTATECTOMY            | 1576                      | 0.00    | 0.00 | 0.73 | 1.57 | 3.56  | 0.00    | 0.49 | 0.91 | 1.40 | 2.63  | 0.00     | 0.57 | 0.92 | 1.29 | 2.21  |
| CHOLECYSTECTOMY          | 714                       | 0.00    | 0.49 | 0.95 | 1.54 | 2.68  | 0.00    | 0.62 | 0.93 | 1.37 | 2.22  | 0.22     | 0.67 | 0.98 | 1.27 | 1.93  |
| HYSTERECTOMY             | 113                       | 0.00    | 0.00 | 0.00 | 2.00 | 6.69  | 0.00    | 0.00 | 0.76 | 1.70 | 3.59  | 0.00     | 0.24 | 0.75 | 1.27 | 2.91  |

TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1989

| CONDITIONS/PROCEDURES    | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |      |      |      |       | 90 DAYS |      |      |      |       | 180 DAYS |      |      |      |       |
|--------------------------|---------------------------|---------|------|------|------|-------|---------|------|------|------|-------|----------|------|------|------|-------|
|                          |                           | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%     | 25%  | 50%  | 75%  | 97.5% |
| OVERALL( < 750 CASES )   | 2746                      | 0.50    | 0.87 | 1.04 | 1.23 | 1.73  | 0.58    | 0.89 | 1.03 | 1.17 | 1.54  | 0.61     | 0.89 | 1.01 | 1.14 | 1.44  |
| OVERALL( >= 750 CASES)   | 2669                      | 0.71    | 0.90 | 1.00 | 1.09 | 1.35  | 0.79    | 0.94 | 1.01 | 1.08 | 1.28  | 0.82     | 0.95 | 1.01 | 1.07 | 1.24  |
| CONDITIONS               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| AMI                      | 1412                      | 0.53    | 0.81 | 0.96 | 1.12 | 1.47  | 0.59    | 0.86 | 1.01 | 1.15 | 1.47  | 0.63     | 0.87 | 1.00 | 1.14 | 1.43  |
| CHF                      | 2293                      | 0.47    | 0.80 | 0.97 | 1.18 | 1.69  | 0.58    | 0.86 | 1.00 | 1.14 | 1.48  | 0.66     | 0.89 | 1.02 | 1.14 | 1.40  |
| PNEUMONIA/INFLUENZA      | 2179                      | 0.45    | 0.77 | 0.97 | 1.19 | 1.67  | 0.54    | 0.85 | 1.01 | 1.18 | 1.55  | 0.60     | 0.86 | 1.02 | 1.18 | 1.51  |
| COPD                     | 324                       | 0.21    | 0.68 | 0.99 | 1.32 | 2.13  | 0.44    | 0.78 | 1.04 | 1.27 | 1.91  | 0.49     | 0.84 | 1.04 | 1.24 | 1.66  |
| TRANS. CEREBRAL ISCHEMIA | 420                       | 0.00    | 0.00 | 0.79 | 1.41 | 3.26  | 0.00    | 0.46 | 0.88 | 1.33 | 2.36  | 0.18     | 0.60 | 0.92 | 1.25 | 1.97  |
| STROKE                   | 1728                      | 0.53    | 0.80 | 0.95 | 1.12 | 1.56  | 0.62    | 0.85 | 0.97 | 1.11 | 1.46  | 0.67     | 0.88 | 0.99 | 1.13 | 1.40  |
| HIP FRACTURE             | 1126                      | 0.24    | 0.67 | 0.95 | 1.30 | 2.04  | 0.39    | 0.75 | 0.98 | 1.21 | 1.71  | 0.46     | 0.78 | 0.97 | 1.18 | 1.59  |
| SEPSIS                   | 174                       | 0.52    | 0.79 | 0.94 | 1.10 | 1.52  | 0.63    | 0.88 | 1.02 | 1.15 | 1.46  | 0.68     | 0.93 | 1.05 | 1.16 | 1.43  |
| PROCEDURES               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| ANGIOPLASTY              | 370                       | 0.00    | 0.46 | 0.84 | 1.35 | 2.55  | 0.00    | 0.55 | 0.88 | 1.33 | 2.52  | 0.00     | 0.61 | 0.94 | 1.32 | 2.44  |
| CABG                     | 501                       | 0.21    | 0.65 | 1.00 | 1.47 | 2.57  | 0.23    | 0.69 | 1.00 | 1.33 | 2.29  | 0.32     | 0.74 | 1.01 | 1.33 | 2.21  |
| PACEMAKER                | 91                        | 0.00    | 0.52 | 0.74 | 1.12 | 2.31  | 0.00    | 0.56 | 0.83 | 1.15 | 2.14  | 0.20     | 0.68 | 0.81 | 1.16 | 1.87  |
| CAROTID ENDARTERECTOMY   | 55                        | 0.00    | 0.00 | 0.82 | 1.51 | 5.01  | 0.00    | 0.47 | 0.86 | 1.31 | 4.00  | 0.00     | 0.43 | 0.85 | 1.28 | 3.12  |
| HIP REPLACEMENT          | 686                       | 0.00    | 0.52 | 0.92 | 1.44 | 2.46  | 0.00    | 0.65 | 0.94 | 1.27 | 1.95  | 0.21     | 0.67 | 0.94 | 1.19 | 1.75  |
| REDUCT. OF HIP FRACTURE  | 246                       | 0.19    | 0.57 | 0.91 | 1.23 | 1.96  | 0.31    | 0.71 | 0.96 | 1.19 | 1.74  | 0.41     | 0.78 | 0.96 | 1.13 | 1.53  |
| PROSTATECTOMY            | 1570                      | 0.00    | 0.00 | 0.67 | 1.50 | 3.46  | 0.00    | 0.47 | 0.86 | 1.36 | 2.67  | 0.00     | 0.58 | 0.93 | 1.28 | 2.15  |
| CHOLECYSTECTOMY          | 680                       | 0.00    | 0.53 | 0.94 | 1.53 | 2.90  | 0.00    | 0.62 | 0.97 | 1.36 | 2.15  | 0.22     | 0.66 | 0.95 | 1.26 | 1.98  |
| HYSTERECTOMY             | 101                       | 0.00    | 0.00 | 0.00 | 1.80 | 5.44  | 0.00    | 0.00 | 0.78 | 1.60 | 4.21  | 0.00     | 0.00 | 0.91 | 1.38 | 2.99  |



TABLE 4  
SMR DISTRIBUTION FOR HOSPITALS WITH GREATER THAN 50 CASES  
1990 STUDY, FY1988

| CONDITIONS/PROCEDURES    | NUMBER<br>OF<br>HOSPITALS | 30 DAYS |      |      |      |       | 90 DAYS |      |      |      |       | 180 DAYS |      |      |      |       |
|--------------------------|---------------------------|---------|------|------|------|-------|---------|------|------|------|-------|----------|------|------|------|-------|
|                          |                           | -----   |      |      |      |       | -----   |      |      |      |       | -----    |      |      |      |       |
|                          |                           | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%    | 25%  | 50%  | 75%  | 97.5% | 2.5%     | 25%  | 50%  | 75%  | 97.5% |
| OVERALL( < 750 CASES )   | 2838                      | 0.46    | 0.89 | 1.05 | 1.23 | 1.75  | 0.54    | 0.90 | 1.03 | 1.16 | 1.57  | 0.59     | 0.90 | 1.02 | 1.14 | 1.45  |
| OVERALL( >= 750 CASES)   | 2693                      | 0.73    | 0.90 | 1.00 | 1.10 | 1.35  | 0.79    | 0.94 | 1.01 | 1.09 | 1.27  | 0.82     | 0.95 | 1.01 | 1.08 | 1.24  |
| CONDITIONS               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| -----                    |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| AMI                      | 1414                      | 0.56    | 0.82 | 0.96 | 1.12 | 1.41  | 0.63    | 0.87 | 1.01 | 1.14 | 1.42  | 0.65     | 0.89 | 1.00 | 1.13 | 1.39  |
| CHF                      | 2246                      | 0.45    | 0.79 | 0.97 | 1.18 | 1.61  | 0.60    | 0.86 | 1.00 | 1.14 | 1.43  | 0.68     | 0.90 | 1.02 | 1.13 | 1.37  |
| PNEUMONIA/INFLUENZA      | 2069                      | 0.44    | 0.79 | 0.97 | 1.17 | 1.68  | 0.57    | 0.85 | 1.01 | 1.17 | 1.59  | 0.61     | 0.87 | 1.01 | 1.16 | 1.53  |
| COPD                     | 310                       | 0.21    | 0.67 | 0.92 | 1.30 | 2.17  | 0.39    | 0.79 | 0.98 | 1.20 | 1.81  | 0.51     | 0.82 | 0.99 | 1.19 | 1.59  |
| TRANS. CEREBRAL ISCHEMIA | 495                       | 0.00    | 0.00 | 0.84 | 1.48 | 2.94  | 0.00    | 0.48 | 0.92 | 1.39 | 2.28  | 0.21     | 0.60 | 0.92 | 1.27 | 1.92  |
| STROKE                   | 1726                      | 0.51    | 0.79 | 0.95 | 1.12 | 1.56  | 0.60    | 0.84 | 0.98 | 1.13 | 1.44  | 0.64     | 0.88 | 1.00 | 1.13 | 1.42  |
| HIP FRACTURE             | 1119                      | 0.24    | 0.65 | 0.96 | 1.27 | 2.07  | 0.40    | 0.78 | 0.98 | 1.21 | 1.77  | 0.47     | 0.80 | 0.98 | 1.17 | 1.64  |
| SEPSIS                   | 133                       | 0.58    | 0.77 | 0.92 | 1.08 | 1.64  | 0.56    | 0.86 | 1.00 | 1.13 | 1.54  | 0.67     | 0.88 | 1.02 | 1.14 | 1.53  |
| PROCEDURES               |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| -----                    |                           |         |      |      |      |       |         |      |      |      |       |          |      |      |      |       |
| ANGIOPLASTY              | 297                       | 0.00    | 0.50 | 0.87 | 1.35 | 2.60  | 0.00    | 0.59 | 0.91 | 1.34 | 2.50  | 0.00     | 0.65 | 0.95 | 1.31 | 2.25  |
| CABG                     | 478                       | 0.21    | 0.68 | 0.98 | 1.39 | 2.40  | 0.32    | 0.73 | 1.00 | 1.36 | 2.12  | 0.38     | 0.75 | 1.01 | 1.31 | 2.04  |
| PACEMAKER                | 83                        | 0.00    | 0.34 | 0.65 | 1.04 | 1.75  | 0.01    | 0.54 | 0.85 | 1.03 | 1.70  | 0.23     | 0.69 | 0.87 | 1.10 | 1.57  |
| CAROTID ENDARTERECTOMY   | 69                        | 0.00    | 0.00 | 0.60 | 1.23 | 3.30  | 0.00    | 0.33 | 0.62 | 1.09 | 2.50  | 0.00     | 0.44 | 0.68 | 1.16 | 1.87  |
| HIP REPLACEMENT          | 670                       | 0.00    | 0.49 | 0.95 | 1.40 | 2.65  | 0.00    | 0.66 | 1.01 | 1.31 | 2.15  | 0.24     | 0.70 | 0.96 | 1.24 | 1.87  |
| REDUCT. OF HIP FRACTURE  | 259                       | 0.00    | 0.61 | 0.91 | 1.26 | 2.16  | 0.38    | 0.74 | 0.96 | 1.21 | 1.94  | 0.44     | 0.77 | 0.96 | 1.16 | 1.79  |
| PROSTATECTOMY            | 1619                      | 0.00    | 0.00 | 0.78 | 1.53 | 3.69  | 0.00    | 0.54 | 0.92 | 1.39 | 2.57  | 0.00     | 0.61 | 0.93 | 1.30 | 2.21  |
| CHOLECYSTECTOMY          | 642                       | 0.00    | 0.50 | 0.96 | 1.44 | 3.04  | 0.00    | 0.61 | 0.96 | 1.36 | 2.26  | 0.25     | 0.66 | 0.96 | 1.27 | 2.01  |
| HYSTERECTOMY             | 90                        | 0.00    | 0.00 | 0.00 | 1.57 | 5.00  | 0.00    | 0.00 | 0.68 | 1.43 | 2.83  | 0.00     | 0.28 | 0.67 | 1.15 | 2.88  |

TABLE 5: MULTIPLICATIVE FACTORS FOR THE CALCULATION OF THE BOUNDS FOR PREDICTION INTERVALS

(n is the number of cases at your hospital and p is the predicted mortality rate)

| p | n    | 99% Prediction Interval |       |       |       |       | 95% Prediction Interval |       |       |       |       | 75% Prediction Interval |       |       |       |       |
|---|------|-------------------------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|-------------------------|-------|-------|-------|-------|
|   |      | Factor for Upper Bound  |       |       |       |       | Factor for Upper Bound  |       |       |       |       | Factor for Upper Bound  |       |       |       |       |
|   |      | 1%                      | 5%    | 10%   | 20%   | 40%   | 1%                      | 5%    | 10%   | 20%   | 40%   | 1%                      | 5%    | 10%   | 20%   | 40%   |
|   | 25   | 2.95                    | 2.73  | 2.68  | 2.63  | 2.59  | 2.15                    | 2.04  | 2.01  | 1.99  | 1.97  | 1.17                    | 1.16  | 1.16  | 1.15  | 1.15  |
|   | 50   | 2.76                    | 2.65  | 2.63  | 2.60  | 2.58  | 2.05                    | 2.00  | 1.99  | 1.97  | 1.96  | 1.16                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 75   | 2.70                    | 2.63  | 2.61  | 2.59  | 2.58  | 2.02                    | 1.99  | 1.98  | 1.97  | 1.96  | 1.16                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 100  | 2.67                    | 2.61  | 2.60  | 2.59  | 2.58  | 2.01                    | 1.98  | 1.97  | 1.97  | 1.96  | 1.16                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 150  | 2.64                    | 2.60  | 2.59  | 2.59  | 2.58  | 1.99                    | 1.97  | 1.97  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 200  | 2.62                    | 2.60  | 2.59  | 2.58  | 2.58  | 1.98                    | 1.97  | 1.97  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 300  | 2.61                    | 2.59  | 2.58  | 2.58  | 2.58  | 1.98                    | 1.97  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 400  | 2.60                    | 2.59  | 2.58  | 2.58  | 2.58  | 1.97                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 500  | 2.59                    | 2.58  | 2.58  | 2.58  | 2.58  | 1.97                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 750  | 2.59                    | 2.58  | 2.58  | 2.58  | 2.58  | 1.97                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 1000 | 2.59                    | 2.58  | 2.58  | 2.58  | 2.58  | 1.96                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 2000 | 2.58                    | 2.58  | 2.58  | 2.58  | 2.58  | 1.96                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   | 5000 | 2.58                    | 2.58  | 2.58  | 2.58  | 2.58  | 1.96                    | 1.96  | 1.96  | 1.96  | 1.96  | 1.15                    | 1.15  | 1.15  | 1.15  | 1.15  |
|   |      |                         |       |       |       |       |                         |       |       |       |       |                         |       |       |       |       |
| p | n    | Factor for Lower Bound  |       |       |       |       | Factor for Lower Bound  |       |       |       |       | Factor for Lower Bound  |       |       |       |       |
|   |      | Factor for Lower Bound  |       |       |       |       | Factor for Lower Bound  |       |       |       |       | Factor for Lower Bound  |       |       |       |       |
|   |      | 1%                      | 5%    | 10%   | 20%   | 40%   | 1%                      | 5%    | 10%   | 20%   | 40%   | 1%                      | 5%    | 10%   | 20%   | 40%   |
|   | 25   | -2.21                   | -2.42 | -2.48 | -2.52 | -2.56 | -1.77                   | -1.88 | -1.91 | -1.93 | -1.95 | -1.13                   | -1.14 | -1.14 | -1.15 | -1.15 |
|   | 50   | -2.39                   | -2.50 | -2.53 | -2.55 | -2.57 | -1.87                   | -1.92 | -1.93 | -1.95 | -1.96 | -1.14                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 75   | -2.45                   | -2.52 | -2.54 | -2.56 | -2.57 | -1.90                   | -1.93 | -1.94 | -1.95 | -1.96 | -1.14                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 100  | -2.48                   | -2.54 | -2.55 | -2.56 | -2.57 | -1.91                   | -1.94 | -1.95 | -1.95 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 150  | -2.51                   | -2.55 | -2.56 | -2.57 | -2.57 | -1.93                   | -1.95 | -1.95 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 200  | -2.53                   | -2.56 | -2.56 | -2.57 | -2.57 | -1.94                   | -1.95 | -1.95 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 300  | -2.54                   | -2.56 | -2.57 | -2.57 | -2.57 | -1.94                   | -1.95 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 400  | -2.55                   | -2.57 | -2.57 | -2.57 | -2.57 | -1.95                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 500  | -2.56                   | -2.57 | -2.57 | -2.57 | -2.58 | -1.95                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 750  | -2.56                   | -2.57 | -2.57 | -2.57 | -2.58 | -1.95                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 1000 | -2.57                   | -2.57 | -2.57 | -2.57 | -2.58 | -1.96                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 2000 | -2.57                   | -2.57 | -2.57 | -2.58 | -2.58 | -1.96                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |
|   | 5000 | -2.57                   | -2.58 | -2.58 | -2.58 | -2.58 | -1.96                   | -1.96 | -1.96 | -1.96 | -1.96 | -1.15                   | -1.15 | -1.15 | -1.15 | -1.15 |

# **Medicare Hospital Information**

# ADDISON COMMUNITY HOSPITAL

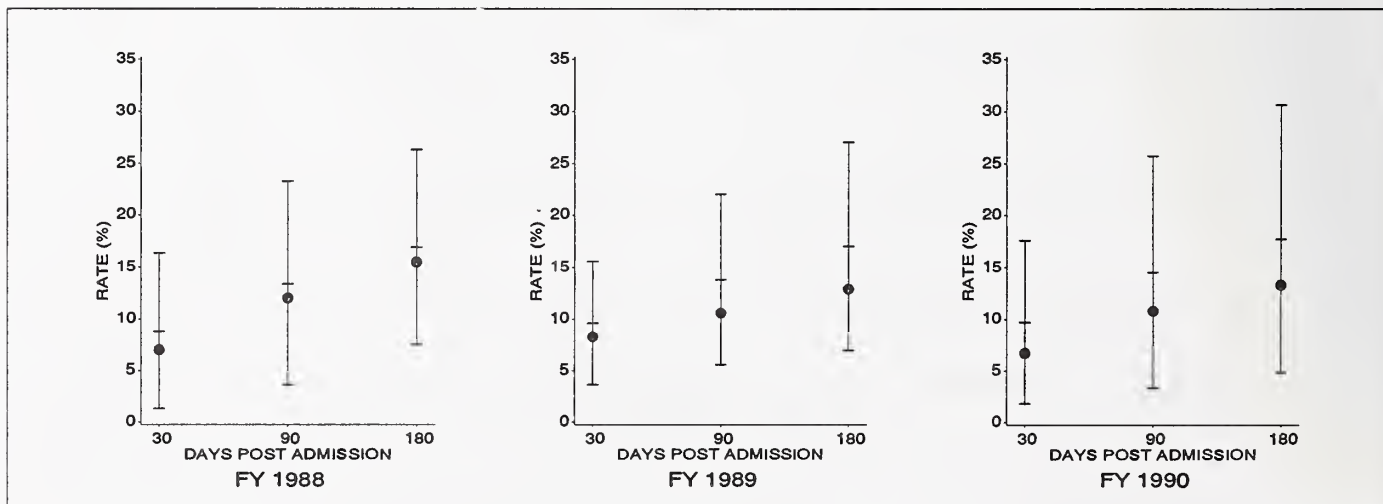
421 N STEER  
ADDISON, MI 49220  
Medicare Provider Number: 230175

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 120             | 6.7                 | 9.7  | 3.9   | 10.8    | 14.5 | 5.6   | 13.3     | 17.7 | 6.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 3               | 33.3                | 19.5 | ----- | 33.3    | 21.9 | ----- | 33.3     | 25.2 | ----- |
| Congestive Heart Failure.....              | 2               | 0.0                 | 19.0 | ----- | 0.0     | 31.1 | ----- | 0.0      | 38.7 | ----- |
| Pneumonia/Influenza.....                   | 23              | 0.0                 | 10.8 | ----- | 8.7     | 15.6 | ----- | 13.0     | 18.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 3.6  | ----- | 0.0     | 7.1  | ----- | 0.0      | 10.0 | ----- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 4.5  | ----- | 0.0     | 9.2  | ----- | 0.0      | 13.7 | ----- |
| Stroke.....                                | 3               | 0.0                 | 23.2 | ----- | 33.3    | 28.7 | ----- | 33.3     | 32.1 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 1               | 0.0                 | 30.5 | ----- | 0.0     | 34.6 | ----- | 0.0      | 40.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 1               | 0.0                 | 0.9  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.0  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) Is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ADDISON COMMUNITY HOSPITAL

Medicare Provider Number: 230175

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.5 years |
| Proportion female.....        | 50.8 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 50.0 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 2.5 %  |
| Admitted for emergency.....                    | 0.8 %  |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 3.3 %  |
| Chronic cardiovascular disease..... | 38.3 % |
| Chronic liver disease.....          | 1.7 %  |
| Chronic renal disease.....          | 6.7 %  |
| Chronic pulmonary disease.....      | 29.2 % |
| Cerebrovascular degeneration.....   | 2.5 %  |
| Diabetes mellitus.....              | 3.3 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 49.1%  |
| State .....         | 47.2%  |
| Outside State ..... | 3.7%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 5.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                    |
|----------------------------|--------------------|
| Total Beds .....           | 24                 |
| Occupancy Rate .....       | 20.0 %             |
| Ownership/Control.....     | District/Authority |
| Medicare Discharges .....  | 48.6 %             |
| Case Mix Index (CMI) ..... | 1.0683             |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 5      |
| Percent of Physicians Board<br>Certified Specialists ..... | 60.0 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 9      |
| Licensed Practical Nurses .....                            | 5      |

### SPECIALTY SERVICES:

|                                       |    |
|---------------------------------------|----|
| Burn Unit .....                       | No |
| Cardiac Intensive Care .....          | No |
| Comprehensive Geriatric .....         | No |
| Hospice Care .....                    | No |
| Medical/Surgical Intensive Care ..... | No |
| Organ/Tissue Transplant .....         | No |
| Other Intensive Care .....            | No |
| Trauma Center .....                   | No |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation .....      | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# ALBION COMMUNITY HOSPITAL

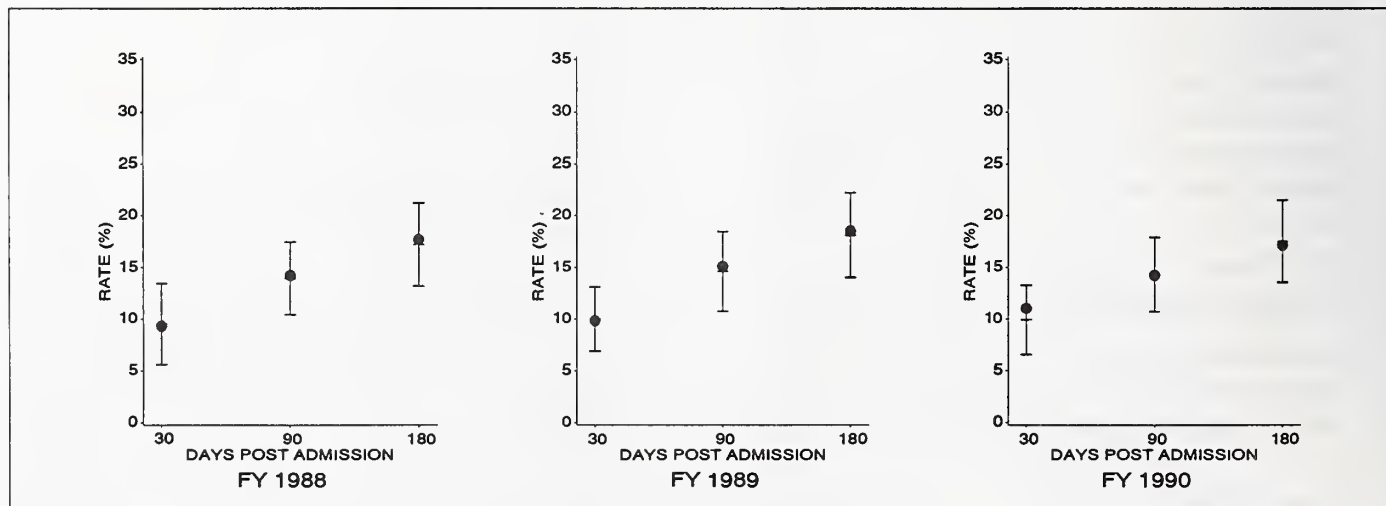
809 W ERIE STREET  
ALBION, MI 49224  
Medicare Provider Number: 230087

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 409                | 11.0                | 9.9  | 1.7   | 14.2    | 14.3 | 1.8   | 17.1     | 17.5 | 2.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 14                 | 21.4                | 32.8 | ----- | 21.4    | 36.6 | ----- | 28.6     | 39.7 | ----- |
| Congestive Heart Failure.....              | 20                 | 5.0                 | 11.1 | ----- | 15.0    | 18.3 | ----- | 20.0     | 23.8 | ----- |
| Pneumonia/Influenza.....                   | 42                 | 16.7                | 13.9 | ----- | 19.0    | 19.0 | ----- | 21.4     | 22.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 10                 | 10.0                | 5.7  | ----- | 10.0    | 10.4 | ----- | 10.0     | 14.2 | ----- |
| Transient Cerebral Ischemia.....           | 4                  | 0.0                 | 1.3  | ----- | 0.0     | 3.0  | ----- | 0.0      | 5.0  | ----- |
| Stroke.....                                | 12                 | 41.7                | 22.7 | ----- | 41.7    | 29.0 | ----- | 50.0     | 32.7 | ----- |
| Hip Fracture.....                          | 8                  | 37.5                | 9.1  | ----- | 37.5    | 16.5 | ----- | 50.0     | 21.1 | ----- |
| Sepsis.....                                | 3                  | 0.0                 | 16.9 | ----- | 33.3    | 23.3 | ----- | 33.3     | 25.6 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 4                  | 25.0                | 5.9  | ----- | 25.0    | 11.4 | ----- | 25.0     | 15.3 | ----- |
| Prostatectomy.....                         | 9                  | 11.1                | 0.7  | ----- | 11.1    | 1.8  | ----- | 11.1     | 3.3  | ----- |
| Cholecystectomy.....                       | 13                 | 0.0                 | 0.8  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.5  | ----- |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.2  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ALBION COMMUNITY HOSPITAL

Medicare Provider Number: 230087

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.6 years

Proportion female..... 53.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 45.7 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 9.8 %

Admitted for emergency..... 47.4 %

### COMORBIDITIES:

Cancer..... 4.4 %

Chronic cardiovascular disease..... 27.9 %

Chronic liver disease..... 2.2 %

Chronic renal disease..... 1.7 %

Chronic pulmonary disease..... 16.6 %

Cerebrovascular degeneration..... 4.2 %

Diabetes mellitus..... 10.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 74.9%

State..... 24.0%

Outside State..... 1.1%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.0 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 61

Occupancy Rate..... 31.0 %

Ownership/Control..... Local Government

Medicare Discharges..... 36.5 %

Case Mix Index (CMI)..... 1.0762

### STAFFING:

Total Number of Physicians..... 33

Percent of Physicians Board  
Certified Specialists..... 69.7 %

Medical Residents/Interns..... 0

Registered Nurses..... 37

Licensed Practical Nurses..... 20

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ALLEGAN GENERAL HOSPITAL

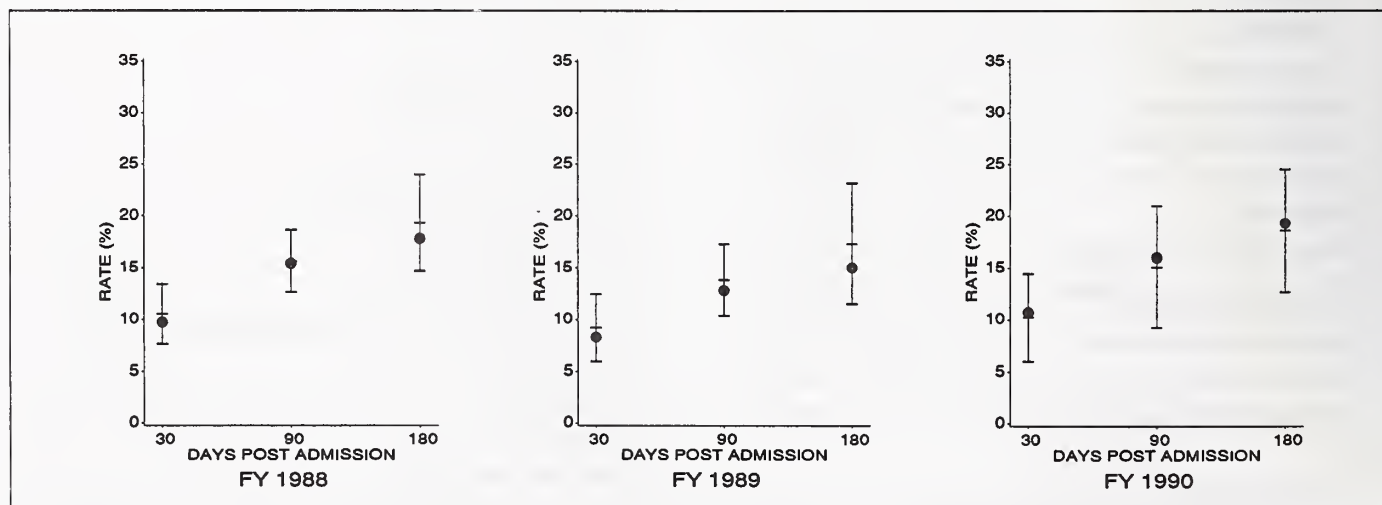
555 LINN ST  
ALLEGAN, MI 49010  
Medicare Provider Number: 230042

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 561             | 10.7                | 10.2 | 2.1   | 16.0    | 15.1 | 2.9   | 19.3     | 18.6 | 3.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 20              | 20.0                | 27.7 | ----- | 20.0    | 30.4 | ----- | 20.0     | 32.9 | ----- |
| Congestive Heart Failure.....              | 38              | 2.6                 | 14.9 | ----- | 10.5    | 23.6 | ----- | 18.4     | 30.2 | ----- |
| Pneumonia/Influenza.....                   | 39              | 10.3                | 15.4 | ----- | 15.4    | 21.5 | ----- | 20.5     | 25.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 14              | 7.1                 | 4.8  | ----- | 21.4    | 9.6  | ----- | 28.6     | 13.6 | ----- |
| Transient Cerebral Ischemia.....           | 7               | 0.0                 | 1.7  | ----- | 0.0     | 4.1  | ----- | 0.0      | 7.1  | ----- |
| Stroke.....                                | 27              | 25.9                | 20.1 | ----- | 29.6    | 27.5 | ----- | 29.6     | 31.6 | ----- |
| Hip Fracture.....                          | 8               | 0.0                 | 6.5  | ----- | 0.0     | 10.2 | ----- | 0.0      | 13.2 | ----- |
| Sepsis.....                                | 8               | 25.0                | 28.6 | ----- | 37.5    | 34.2 | ----- | 37.5     | 38.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 3               | 0.0                 | 2.7  | ----- | 0.0     | 5.4  | ----- | 0.0      | 8.1  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 4.9  | ----- | 0.0     | 7.9  | ----- | 0.0      | 10.3 | ----- |
| Open Reduction of Hip Fracture.....        | 5               | 0.0                 | 4.7  | ----- | 0.0     | 7.7  | ----- | 0.0      | 10.2 | ----- |
| Prostatectomy.....                         | 5               | 0.0                 | 0.3  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |
| Cholecystectomy.....                       | 2               | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.7  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 1.2  | ----- | 0.0     | 2.8  | ----- | 25.0     | 4.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ALLEGAN GENERAL HOSPITAL

Medicare Provider Number: 230042

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.2 years |
| Proportion female.....        | 58.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 38.9 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 10.7 % |
| Admitted for emergency.....                    | 82.7 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.7 %  |
| Chronic cardiovascular disease..... | 37.8 % |
| Chronic liver disease.....          | 0.5 %  |
| Chronic renal disease.....          | 3.0 %  |
| Chronic pulmonary disease.....      | 20.0 % |
| Cerebrovascular degeneration.....   | 5.0 %  |
| Diabetes mellitus.....              | 10.0 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 73.4%  |
| State .....         | 23.3%  |
| Outside State ..... | 3.3%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.2 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 63                  |
| Occupancy Rate .....       | 41.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 43.5 %              |
| Case Mix Index (CMI) ..... | 1.1019              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 27     |
| Percent of Physicians Board<br>Certified Specialists ..... | 85.2 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 59     |
| Licensed Practical Nurses.....                             | 21     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# ALPENA GENERAL HOSPITAL

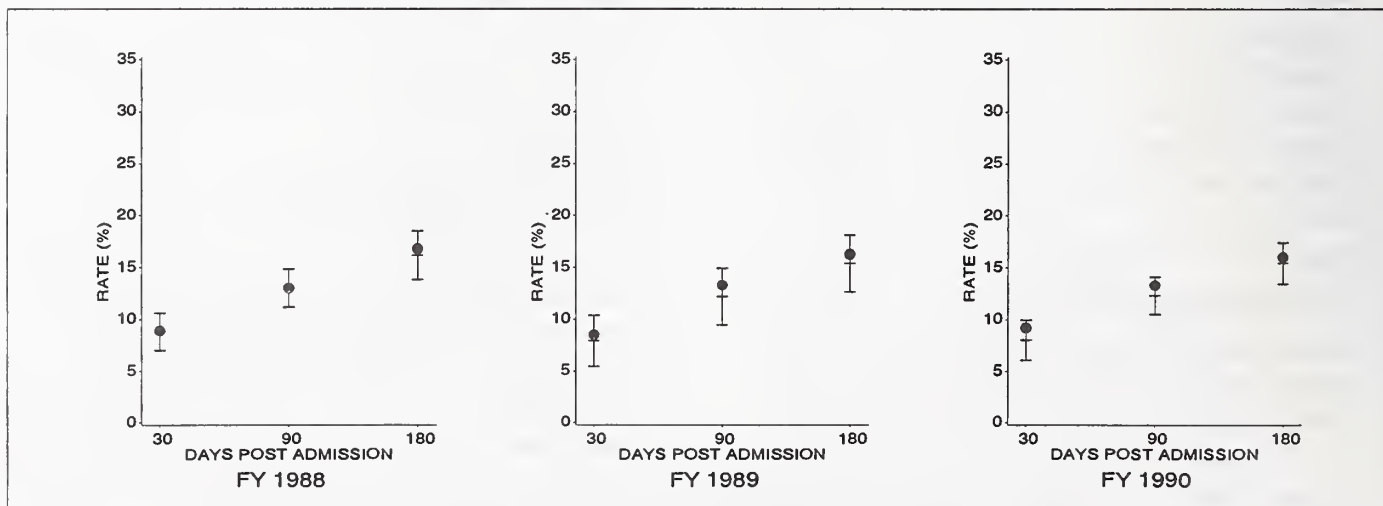
1501-1511 W CHISHOLM ST  
ALPENA, MI 49707  
Medicare Provider Number: 230036

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1571            | 9.2                 | 8.0  | 1.0  | 13.3    | 12.3 | 0.9  | 16.0     | 15.4 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 60              | 36.7                | 21.2 | 8.7  | 45.0    | 24.7 | 8.6  | 46.7     | 27.5 | 8.5  |
| Congestive Heart Failure.....              | 101             | 17.8                | 13.7 | 4.8  | 22.8    | 22.4 | 5.5  | 29.7     | 28.9 | 6.0  |
| Pneumonia/Influenza.....                   | 49              | 14.3                | 14.8 | ---- | 24.5    | 21.7 | ---- | 28.6     | 26.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 15              | 13.3                | 6.2  | ---- | 13.3    | 11.1 | ---- | 26.7     | 15.0 | ---- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.5  | ---- | 0.0     | 3.6  | ---- | 6.7      | 6.1  | ---- |
| Stroke.....                                | 65              | 16.9                | 18.3 | 4.9  | 18.5    | 25.4 | 6.5  | 18.5     | 29.6 | 7.6  |
| Hip Fracture.....                          | 48              | 2.1                 | 4.8  | ---- | 6.3     | 8.8  | ---- | 8.3      | 12.0 | ---- |
| Sepsis.....                                | 31              | 32.3                | 24.5 | ---- | 35.5    | 31.3 | ---- | 41.9     | 36.6 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 3               | 0.0                 | 3.5  | ---- | 0.0     | 6.6  | ---- | 0.0      | 8.8  | ---- |
| Carotid Endarterectomy.....                | 7               | 0.0                 | 1.8  | ---- | 14.3    | 3.4  | ---- | 14.3     | 5.2  | ---- |
| Hip Replacement/Reconstruction.....        | 38              | 2.6                 | 1.9  | ---- | 2.6     | 4.0  | ---- | 2.6      | 5.6  | ---- |
| Open Reduction of Hip Fracture.....        | 31              | 0.0                 | 4.8  | ---- | 6.5     | 9.1  | ---- | 9.7      | 12.3 | ---- |
| Prostatectomy.....                         | 46              | 0.0                 | 0.9  | ---- | 4.3     | 2.1  | ---- | 4.3      | 3.7  | ---- |
| Cholecystectomy.....                       | 30              | 3.3                 | 1.6  | ---- | 3.3     | 3.0  | ---- | 6.7      | 4.0  | ---- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.5  | ---- | 0.0     | 1.1  | ---- | 0.0      | 1.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ALPENA GENERAL HOSPITAL

Medicare Provider Number: 230036

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.3 years  
Proportion female..... 53.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 99.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 21.5 %  
Admitted for emergency..... 65.8 %

### COMORBIDITIES:

Cancer..... 5.9 %  
Chronic cardiovascular disease..... 41.4 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 19.1 %  
Cerebrovascular degeneration..... 5.2 %  
Diabetes mellitus..... 14.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 59.3%  
State ..... 39.0%  
Outside State ..... 1.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 169  
Occupancy Rate ..... 57.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 42.7 %  
Case Mix Index (CMI) ..... 1.2561

### STAFFING:

Total Number of Physicians..... 56  
Percent of Physicians Board  
Certified Specialists..... 64.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 109  
Licensed Practical Nurses ..... 54

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ANDERSON MEMORIAL HOSPITAL

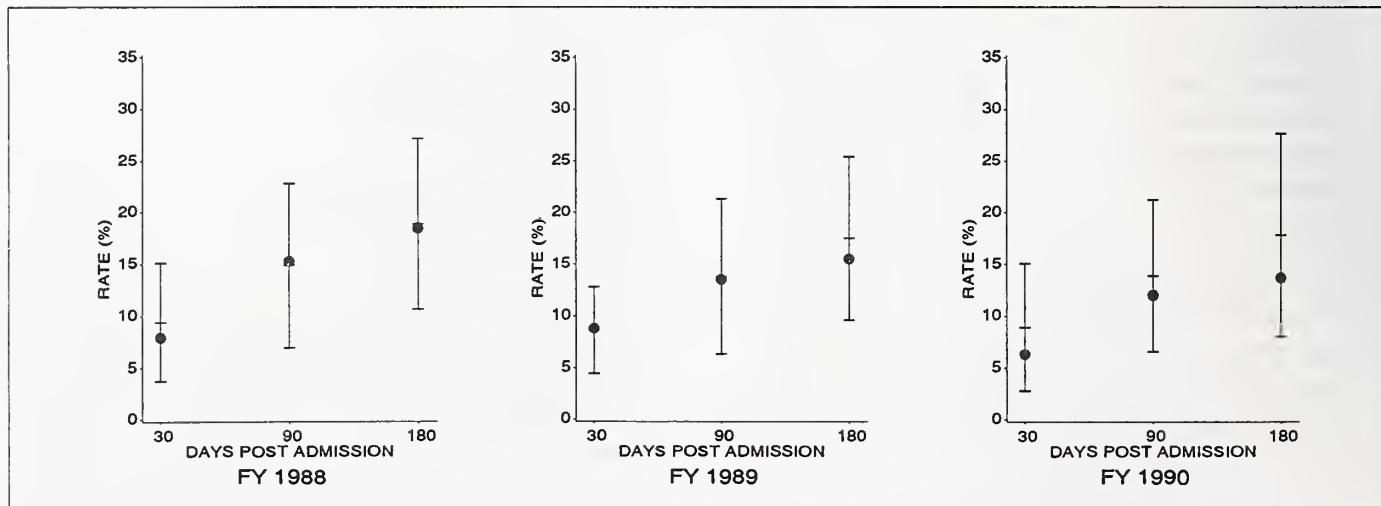
400 MAIN ST  
NORWAY, MI 49870  
Medicare Provider Number: 230138

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 175             | 6.3                 | 8.9  | 3.1   | 12.0    | 13.9 | 3.7   | 13.7     | 17.8 | 4.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 3               | 33.3                | 34.1 | ----- | 33.3    | 38.1 | ----- | 33.3     | 41.7 | ----- |
| Congestive Heart Failure.....              | 25              | 8.0                 | 12.9 | ----- | 16.0    | 19.9 | ----- | 16.0     | 25.9 | ----- |
| Pneumonia/Influenza.....                   | 10              | 0.0                 | 16.1 | ----- | 10.0    | 21.9 | ----- | 10.0     | 26.2 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 2               | 0.0                 | 7.8  | ----- | 0.0     | 15.8 | ----- | 0.0      | 24.0 | ----- |
| Transient Cerebral Ischemia.....           | 1               | 0.0                 | 0.9  | ----- | 0.0     | 2.2  | ----- | 0.0      | 4.0  | ----- |
| Stroke.....                                | 8               | 25.0                | 14.0 | ----- | 37.5    | 20.0 | ----- | 37.5     | 23.9 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ANDERSON MEMORIAL HOSPITAL

Medicare Provider Number: 230138

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.4 years  
Proportion female..... 68.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 65.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.1 %  
Admitted for emergency..... 33.1 %

### COMORBIDITIES:

Cancer..... 5.1 %  
Chronic cardiovascular disease..... 34.9 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 12.0 %  
Cerebrovascular degeneration..... 8.6 %  
Diabetes mellitus..... 9.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 80.5%  
State ..... 10.8%  
Outside State ..... 8.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 19  
Ownership/Control..... Local Government  
Case Mix Index (CMI) ..... 0.8856

### STAFFING:

Medical Residents/Interns ..... 0  
Registered Nurses..... 5  
Licensed Practical Nurses ..... 6

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ANNAPOLIS HOSPITAL

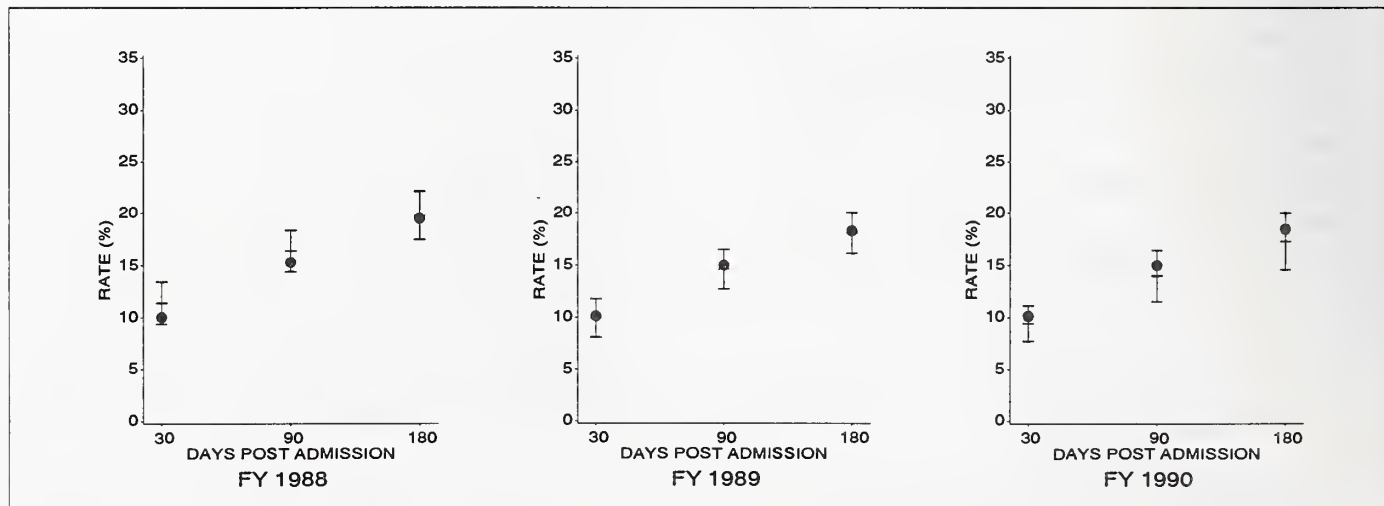
33155 ANNAPOLIS AVE  
WAYNE, MI 48184  
Medicare Provider Number: 230142

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1777            | 10.1                | 9.4  | 0.9   | 15.0    | 14.0 | 1.2   | 18.5     | 17.3 | 1.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 52              | 32.7                | 23.3 | 7.9   | 34.6    | 26.1 | 8.9   | 38.5     | 28.6 | 8.7   |
| Congestive Heart Failure.....              | 116             | 6.9                 | 15.7 | 5.4   | 16.4    | 24.8 | 5.9   | 24.1     | 31.0 | 6.1   |
| Pneumonia/Influenza.....                   | 90              | 14.4                | 16.3 | 4.5   | 21.1    | 22.0 | 4.6   | 26.7     | 26.1 | 4.9   |
| Chronic Obstructive Pulmonary Disease..... | 42              | 2.4                 | 10.4 | ----- | 11.9    | 17.1 | ----- | 14.3     | 22.1 | ----- |
| Transient Cerebral Ischemia.....           | 45              | 0.0                 | 1.7  | ----- | 2.2     | 3.9  | ----- | 8.9      | 6.2  | ----- |
| Stroke.....                                | 90              | 20.0                | 20.6 | 4.5   | 26.7    | 27.1 | 5.0   | 32.2     | 30.7 | 5.3   |
| Hip Fracture.....                          | 43              | 16.3                | 6.8  | ----- | 25.6    | 11.9 | ----- | 27.9     | 15.3 | ----- |
| Sepsis.....                                | 8               | 37.5                | 30.4 | ----- | 37.5    | 37.5 | ----- | 37.5     | 41.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 17              | 5.9                 | 4.1  | ----- | 5.9     | 8.5  | ----- | 5.9      | 12.4 | ----- |
| Carotid Endarterectomy.....                | 9               | 0.0                 | 1.5  | ----- | 0.0     | 2.8  | ----- | 0.0      | 3.9  | ----- |
| Hip Replacement/Reconstruction.....        | 13              | 7.7                 | 5.2  | ----- | 23.1    | 9.8  | ----- | 23.1     | 13.0 | ----- |
| Open Reduction of Hip Fracture.....        | 28              | 14.3                | 6.4  | ----- | 21.4    | 11.2 | ----- | 25.0     | 14.6 | ----- |
| Prostatectomy.....                         | 106             | 1.9                 | 0.9  | 1.2   | 6.6     | 2.2  | 3.8   | 7.5      | 3.8  | 3.8   |
| Cholecystectomy.....                       | 34              | 2.9                 | 4.0  | ----- | 5.9     | 7.0  | ----- | 5.9      | 8.8  | ----- |
| Hysterectomy.....                          | 12              | 0.0                 | 0.2  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ANNAPOLIS HOSPITAL

Medicare Provider Number: 230142

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.0 years |
| Proportion female.....        | 56.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 27.6 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 11.7 % |
| Admitted for emergency.....                    | 83.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.7 %  |
| Chronic cardiovascular disease..... | 49.9 % |
| Chronic liver disease.....          | 1.0 %  |
| Chronic renal disease.....          | 3.7 %  |
| Chronic pulmonary disease.....      | 26.3 % |
| Cerebrovascular degeneration.....   | 2.8 %  |
| Diabetes mellitus.....              | 7.3 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 92.5%  |
| State .....         | 5.7%   |
| Outside State ..... | 1.8%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 9.0 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 415                 |
| Occupancy Rate .....       | 41.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 32.9 %              |
| Case Mix Index (CMI) ..... | 1.2451              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 193    |
| Percent of Physicians Board<br>Certified Specialists..... | 77.2 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 263    |
| Licensed Practical Nurses .....                           | 44     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | Yes |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used In calculating mortality rates

# BARAGA COUNTY MEMORIAL HOSPITAL

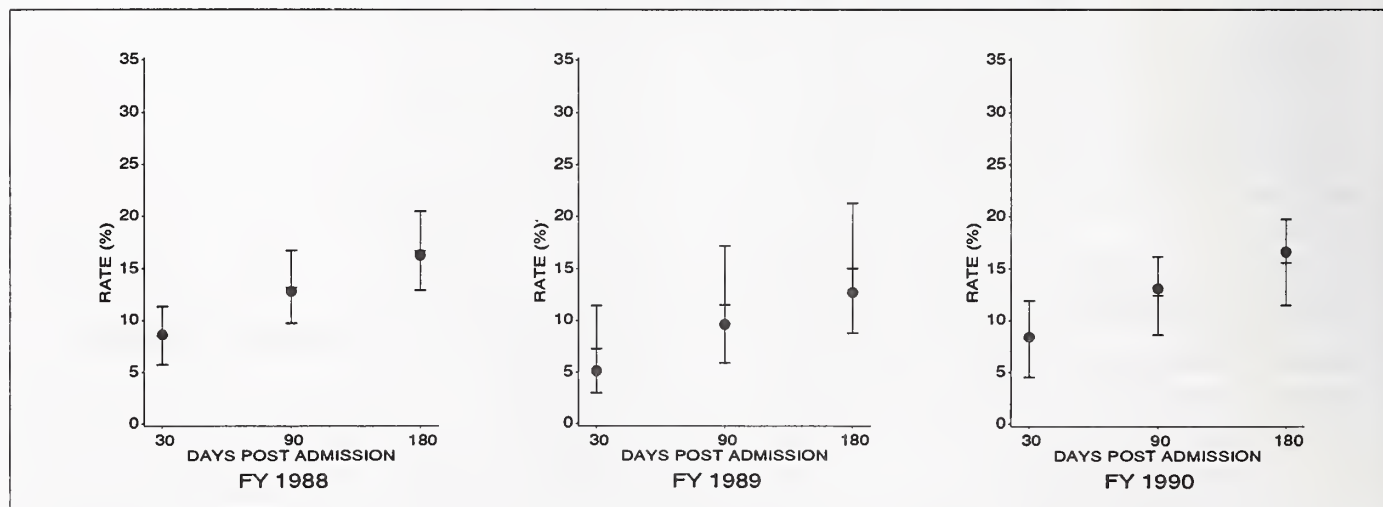
770 NORTH MAIN STREET  
LANSE, MI 49946  
Medicare Provider Number: 230056

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 367             | 8.4                 | 8.2  | 1.8   | 13.1    | 12.4 | 1.9   | 16.6     | 15.6 | 2.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 9               | 33.3                | 19.2 | ----- | 33.3    | 21.7 | ----- | 33.3     | 23.9 | ----- |
| Congestive Heart Failure.....              | 23              | 13.0                | 15.4 | ----- | 17.4    | 23.9 | ----- | 21.7     | 30.2 | ----- |
| Pneumonia/Influenza.....                   | 26              | 19.2                | 12.7 | ----- | 23.1    | 17.0 | ----- | 26.9     | 20.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 3.5  | ----- | 0.0     | 7.1  | ----- | 0.0      | 11.1 | ----- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.7  | ----- | 0.0     | 3.9  | ----- | 6.7      | 6.6  | ----- |
| Stroke.....                                | 21              | 23.8                | 20.2 | ----- | 42.9    | 25.0 | ----- | 42.9     | 28.4 | ----- |
| Hip Fracture.....                          | 4               | 0.0                 | 4.5  | ----- | 0.0     | 8.4  | ----- | 25.0     | 11.5 | ----- |
| Sepsis.....                                | 9               | 22.2                | 22.4 | ----- | 22.2    | 29.4 | ----- | 22.2     | 32.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 11              | 0.0                 | 0.7  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.9  | ----- |
| Cholecystectomy.....                       | 10              | 10.0                | 1.7  | ----- | 10.0    | 3.2  | ----- | 10.0     | 4.5  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.5  | ----- | 0.0     | 1.1  | ----- | 0.0      | 1.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BARAGA COUNTY MEMORIAL HOSPITAL

Medicare Provider Number: 230056

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years  
Proportion female..... 52.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 56.7 %  
Transferred from skilled nursing facility..... 1.9 %  
Admitted for elective procedure..... 3.8 %  
Admitted for emergency..... 0.8 %

### COMORBIDITIES:

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 50.7 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 0.8 %  
Chronic pulmonary disease..... 11.7 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 12.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 72.4%  
State ..... 26.2%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 61  
Occupancy Rate ..... 70.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 58.4 %  
Case Mix Index (CMI) ..... 1.0077

### STAFFING:

Total Number of Physicians..... 9  
Percent of Physicians Board  
Certified Specialists ..... 88.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 15  
Licensed Practical Nurses ..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# BATTLE CREEK ADVENTIST HOSPITAL

165 NORTH WASHINGTON AVE  
BATTLE CREEK, MI 49016  
Medicare Provider Number: 230043

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 5                  | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.7  | ---- |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Congestive Heart Failure.....              | 0                  |                     |      |      |         |      |      |          |      |      |
| Pneumonia/Influenza.....                   | 0                  |                     |      |      |         |      |      |          |      |      |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Fracture.....                          | 0                  |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0                  |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# BATTLE CREEK ADVENTIST HOSPITAL

Medicare Provider Number: 230043

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 52.8 years

Proportion female..... 60.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 60.0 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.0 %

Admitted for emergency..... 20.0 %

### COMORBIDITIES:

Cancer..... 0.0 %

Chronic cardiovascular disease..... 0.0 %

Chronic liver disease..... 0.0 %

Chronic renal disease..... 0.0 %

Chronic pulmonary disease..... 0.0 %

Cerebrovascular degeneration..... 20.0 %

Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 100.0%

State ..... 0.0%

Outside State ..... 0.0%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 21.5 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 124

Occupancy Rate ..... 66.0 %

Ownership/Control..... Church

Medicare Discharges ..... 15.6 %

Case Mix Index (CMI) ..... 0.8935

### STAFFING:

Total Number of Physicians..... 11

Percent of Physicians Board  
Certified Specialists ..... 54.5 %

Medical Residents/Interns ..... 0

Registered Nurses..... 58

Licensed Practical Nurses ..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes

Rehabilitation ..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BATTLE CREEK HEALTH SYSTEM

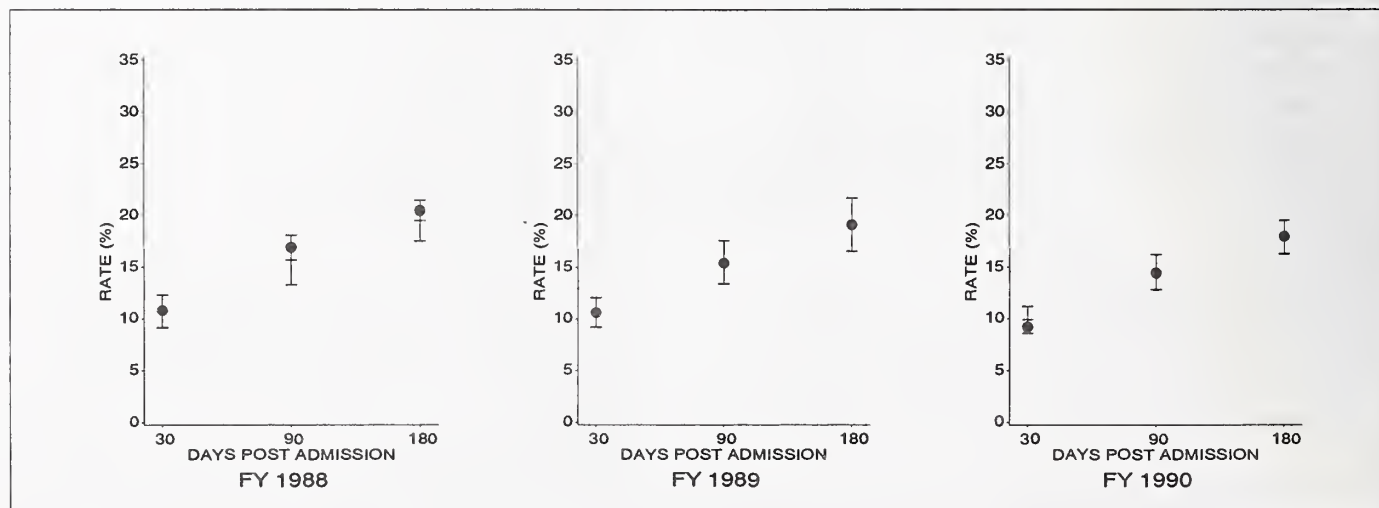
300 NORTH AVENUE  
BATTLE CREEK, MI 49016  
Medicare Provider Number: 230075

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3015            | 9.2                 | 9.9  | 0.7  | 14.4    | 14.5 | 0.9  | 18.0     | 17.9 | 0.8  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 77              | 22.1                | 28.3 | 9.7  | 24.7    | 31.7 | 10.2 | 29.9     | 34.7 | 9.7  |
| Congestive Heart Failure.....              | 205             | 16.1                | 14.4 | 3.6  | 25.9    | 23.0 | 3.8  | 32.7     | 29.1 | 4.3  |
| Pneumonia/Influenza.....                   | 198             | 14.6                | 16.2 | 2.9  | 20.7    | 22.0 | 3.2  | 25.8     | 25.9 | 3.4  |
| Chronic Obstructive Pulmonary Disease..... | 42              | 0.0                 | 10.2 | ---- | 4.8     | 17.1 | ---- | 4.8      | 22.1 | ---- |
| Transient Cerebral Ischemia.....           | 40              | 0.0                 | 1.6  | ---- | 5.0     | 3.6  | ---- | 10.0     | 5.9  | ---- |
| Stroke.....                                | 130             | 18.5                | 19.6 | 4.2  | 23.8    | 24.8 | 4.3  | 28.5     | 28.1 | 4.0  |
| Hip Fracture.....                          | 93              | 10.8                | 6.5  | 4.1  | 15.1    | 11.1 | 5.0  | 21.5     | 14.2 | 6.4  |
| Sepsis.....                                | 52              | 13.5                | 26.1 | 9.2  | 23.1    | 34.1 | 9.5  | 25.0     | 38.5 | 10.1 |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 34              | 5.9                 | 4.3  | ---- | 8.8     | 7.3  | ---- | 11.8     | 10.2 | ---- |
| Carotid Endarterectomy.....                | 34              | 0.0                 | 1.3  | ---- | 0.0     | 2.4  | ---- | 0.0      | 3.6  | ---- |
| Hip Replacement/Reconstruction.....        | 54              | 3.7                 | 3.0  | 4.8  | 11.1    | 5.4  | 6.4  | 13.0     | 7.3  | 7.7  |
| Open Reduction of Hip Fracture.....        | 59              | 10.2                | 6.2  | 4.7  | 13.6    | 10.9 | 5.1  | 22.0     | 14.2 | 7.5  |
| Prostatectomy.....                         | 128             | 2.3                 | 1.0  | 1.3  | 3.9     | 2.3  | 1.8  | 4.7      | 3.8  | 2.4  |
| Cholecystectomy.....                       | 73              | 4.1                 | 2.0  | 3.3  | 6.8     | 3.9  | 5.0  | 8.2      | 5.5  | 5.5  |
| Hysterectomy.....                          | 20              | 0.0                 | 1.1  | ---- | 0.0     | 2.2  | ---- | 0.0      | 3.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BATTLE CREEK HEALTH SYSTEM

Medicare Provider Number: 230075

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.1 years  
Proportion female..... 57.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 26.1 %  
Admitted for emergency..... 63.3 %

### COMORBIDITIES:

Cancer..... 7.4 %  
Chronic cardiovascular disease..... 37.6 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 15.1 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 7.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 84.2%  
State ..... 14.0%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 398  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 41.5 %  
Case Mix Index (CMI) ..... 1.2758

### STAFFING:

Total Number of Physicians..... 152  
Percent of Physicians Board  
Certified Specialists..... 65.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 361  
Licensed Practical Nurses ..... 93

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# BAY MEDICAL CENTER

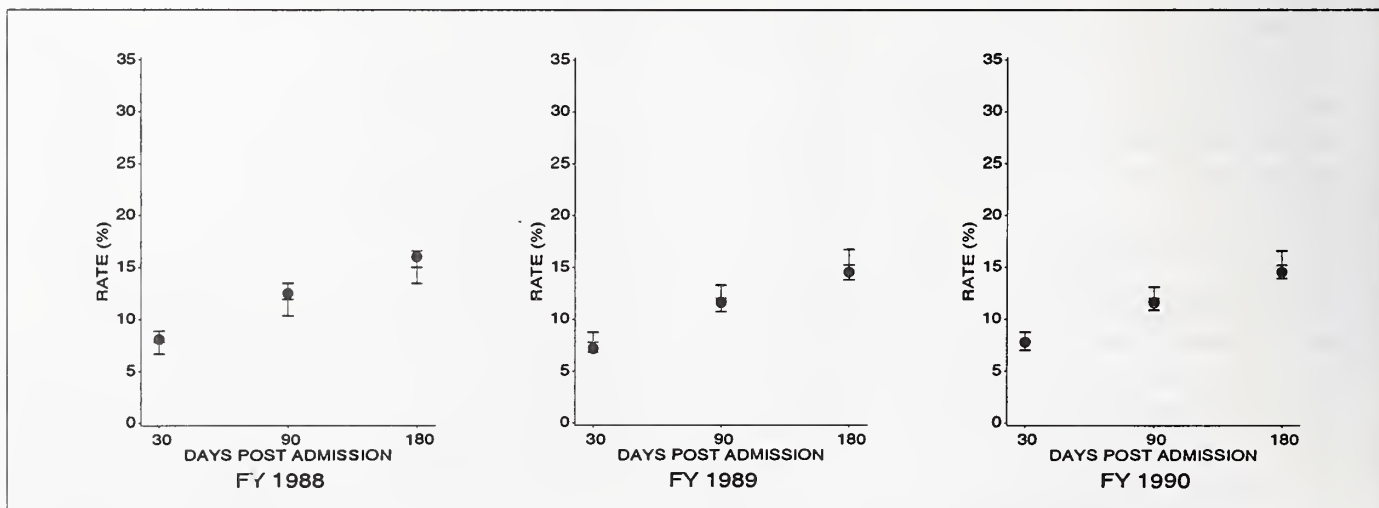
1900 COLUMBUS AVE  
BAY CITY, MI 48706  
Medicare Provider Number: 230041

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3644               | 7.8                 | 7.9  | 0.4  | 11.6    | 12.0 | 0.6  | 14.5     | 15.2 | 0.7  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 122                | 27.0                | 27.3 | 4.0  | 32.0    | 30.3 | 4.5  | 34.4     | 33.0 | 4.5  |
| Congestive Heart Failure.....              | 227                | 18.5                | 13.5 | 2.9  | 22.5    | 21.8 | 3.0  | 27.8     | 27.8 | 3.0  |
| Pneumonia/Influenza.....                   | 123                | 15.4                | 15.8 | 3.6  | 20.3    | 21.8 | 4.2  | 24.4     | 25.9 | 5.2  |
| Chronic Obstructive Pulmonary Disease..... | 34                 | 14.7                | 9.0  | ---- | 20.6    | 15.8 | ---- | 29.4     | 21.0 | ---- |
| Transient Cerebral Ischemia.....           | 125                | 1.6                 | 1.8  | 1.2  | 2.4     | 3.8  | 2.1  | 3.2      | 6.1  | 3.6  |
| Stroke.....                                | 133                | 21.1                | 18.2 | 3.7  | 27.1    | 24.3 | 5.6  | 32.3     | 27.9 | 5.0  |
| Hip Fracture.....                          | 81                 | 9.9                 | 6.6  | 4.1  | 17.3    | 11.4 | 6.2  | 22.2     | 14.7 | 7.5  |
| Sepsis.....                                | 30                 | 26.7                | 30.0 | ---- | 33.3    | 37.9 | ---- | 36.7     | 42.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 34                 | 0.0                 | 2.6  | ---- | 5.9     | 5.0  | ---- | 5.9      | 7.4  | ---- |
| Carotid Endarterectomy.....                | 37                 | 2.7                 | 1.7  | ---- | 5.4     | 3.0  | ---- | 8.1      | 4.4  | ---- |
| Hip Replacement/Reconstruction.....        | 59                 | 5.1                 | 3.5  | 3.6  | 6.8     | 6.1  | 4.7  | 8.5      | 7.9  | 5.1  |
| Open Reduction of Hip Fracture.....        | 37                 | 5.4                 | 5.5  | ---- | 13.5    | 10.0 | ---- | 16.2     | 13.1 | ---- |
| Prostatectomy.....                         | 108                | 0.9                 | 1.0  | 1.2  | 2.8     | 2.4  | 1.6  | 4.6      | 4.0  | 2.6  |
| Cholecystectomy.....                       | 58                 | 5.2                 | 2.5  | 4.2  | 10.3    | 4.8  | 6.2  | 10.3     | 6.6  | 6.8  |
| Hysterectomy.....                          | 22                 | 0.0                 | 0.6  | ---- | 0.0     | 1.4  | ---- | 0.0      | 2.1  | ---- |

\* The Standard Deviation (SD) Is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BAY MEDICAL CENTER

Medicare Provider Number: 230041

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.5 years  
Proportion female..... 56.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.7 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 12.5 %  
Admitted for emergency..... 30.7 %

### COMORBIDITIES:

Cancer..... 7.1 %  
Chronic cardiovascular disease..... 47.1 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 1.9 %  
Chronic pulmonary disease..... 17.5 %  
Cerebrovascular degeneration..... 2.4 %  
Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 78.5%  
State ..... 20.1%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 420  
Occupancy Rate ..... 63.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 41.2 %  
Case Mix Index (CMI) ..... 1.1225

### STAFFING:

Total Number of Physicians..... 127  
Percent of Physicians Board  
Certified Specialists ..... 66.9 %  
Medical Residents/Interns ..... 5  
Registered Nurses..... 319  
Licensed Practical Nurses ..... 102

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BERRIEN GENERAL HOSPITAL

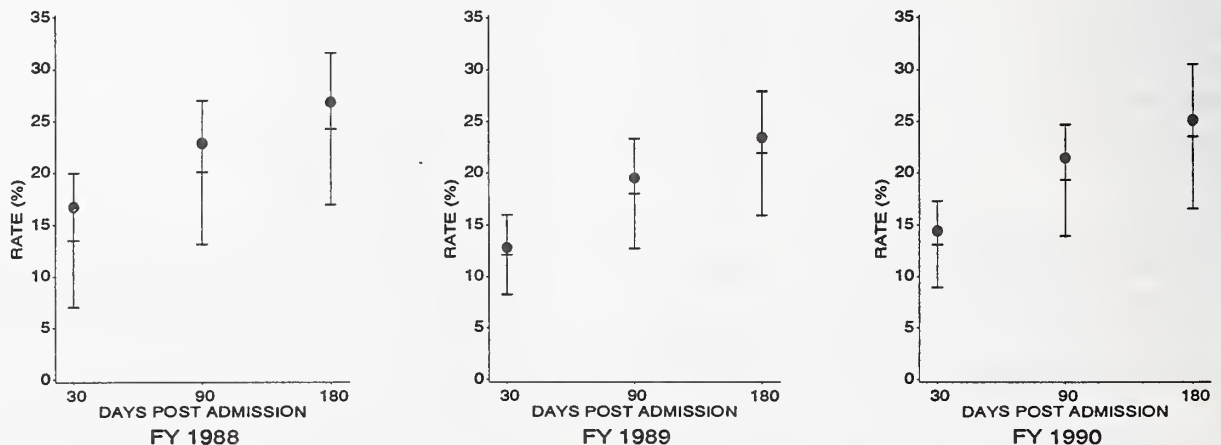
6418 DEANS HILL RD  
BERRIEN CENTER, MI 49102  
Medicare Provider Number: 230125

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 402             | 14.4                | 13.1 | 2.1   | 21.4    | 19.3 | 2.7   | 25.1     | 23.5 | 3.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 10              | 60.0                | 25.4 | ----- | 60.0    | 27.4 | ----- | 60.0     | 29.9 | ----- |
| Congestive Heart Failure.....              | 22              | 18.2                | 17.7 | ----- | 22.7    | 27.4 | ----- | 36.4     | 35.0 | ----- |
| Pneumonia/Influenza.....                   | 44              | 22.7                | 17.5 | ----- | 34.1    | 24.4 | ----- | 38.6     | 28.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 1               | 0.0                 | 1.8  | ----- | 0.0     | 3.5  | ----- | 0.0      | 5.3  | ----- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 2.4  | ----- | 0.0     | 5.4  | ----- | 0.0      | 8.2  | ----- |
| Stroke.....                                | 32              | 15.6                | 23.0 | ----- | 21.9    | 30.5 | ----- | 25.0     | 34.3 | ----- |
| Hip Fracture.....                          | 17              | 0.0                 | 8.3  | ----- | 11.8    | 14.6 | ----- | 17.6     | 18.6 | ----- |
| Sepsis.....                                | 12              | 58.3                | 33.9 | ----- | 66.7    | 45.3 | ----- | 66.7     | 50.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 3.8  | ----- | 0.0     | 7.4  | ----- | 0.0      | 10.6 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 10              | 0.0                 | 4.2  | ----- | 0.0     | 7.5  | ----- | 10.0     | 9.9  | ----- |
| Open Reduction of Hip Fracture.....        | 9               | 0.0                 | 10.3 | ----- | 22.2    | 18.7 | ----- | 22.2     | 23.8 | ----- |
| Prostatectomy.....                         | 2               | 0.0                 | 3.0  | ----- | 0.0     | 7.3  | ----- | 0.0      | 11.4 | ----- |
| Cholecystectomy.....                       | 13              | 0.0                 | 3.5  | ----- | 7.7     | 7.0  | ----- | 7.7      | 9.7  | ----- |
| Hysterectomy.....                          | 5               | 20.0                | 1.3  | ----- | 20.0    | 2.5  | ----- | 40.0     | 3.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BERRIEN GENERAL HOSPITAL

Medicare Provider Number: 230125

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.6 years |
| Proportion female.....        | 62.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 29.4 % |
| Transferred from skilled nursing facility..... | 4.7 %  |
| Admitted for elective procedure.....           | 0.0 %  |
| Admitted for emergency.....                    | 62.4 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.0 %  |
| Chronic cardiovascular disease..... | 34.8 % |
| Chronic liver disease.....          | 1.5 %  |
| Chronic renal disease.....          | 10.9 % |
| Chronic pulmonary disease.....      | 16.4 % |
| Cerebrovascular degeneration.....   | 5.0 %  |
| Diabetes mellitus.....              | 8.5 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                    |        |
|--------------------|--------|
| County/City.....   | 90.4%  |
| State.....         | 5.7%   |
| Outside State..... | 3.9%   |
| Total.....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|               |          |
|---------------|----------|
| Hospital..... | 7.9 Days |
| State.....    | 8.5 Days |
| National..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                           |                  |
|---------------------------|------------------|
| Total Beds.....           | 248              |
| Occupancy Rate.....       | 83.0 %           |
| Ownership/Control.....    | Local Government |
| Medicare Discharges.....  | 22.0 %           |
| Case Mix Index (CMI)..... | 1.4337           |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 41     |
| Percent of Physicians Board<br>Certified Specialists..... | 65.9 % |
| Medical Residents/Interns.....                            | 0      |
| Registered Nurses.....                                    | 63     |
| Licensed Practical Nurses.....                            | 5      |

### SPECIALTY SERVICES:

|                                      |     |
|--------------------------------------|-----|
| Burn Unit.....                       | No  |
| Cardiac Intensive Care.....          | No  |
| Comprehensive Geriatric.....         | Yes |
| Hospice Care.....                    | No  |
| Medical/Surgical Intensive Care..... | Yes |
| Organ/Tissue Transplant.....         | No  |
| Other Intensive Care.....            | No  |
| Trauma Center.....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                          |     |
|--------------------------|-----|
| Alcohol/Drug.....        | No  |
| Rehabilitation.....      | No  |
| Psychiatric.....         | No  |
| Medicare Swing Beds..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# BEYER MEMORIAL HOSPITAL

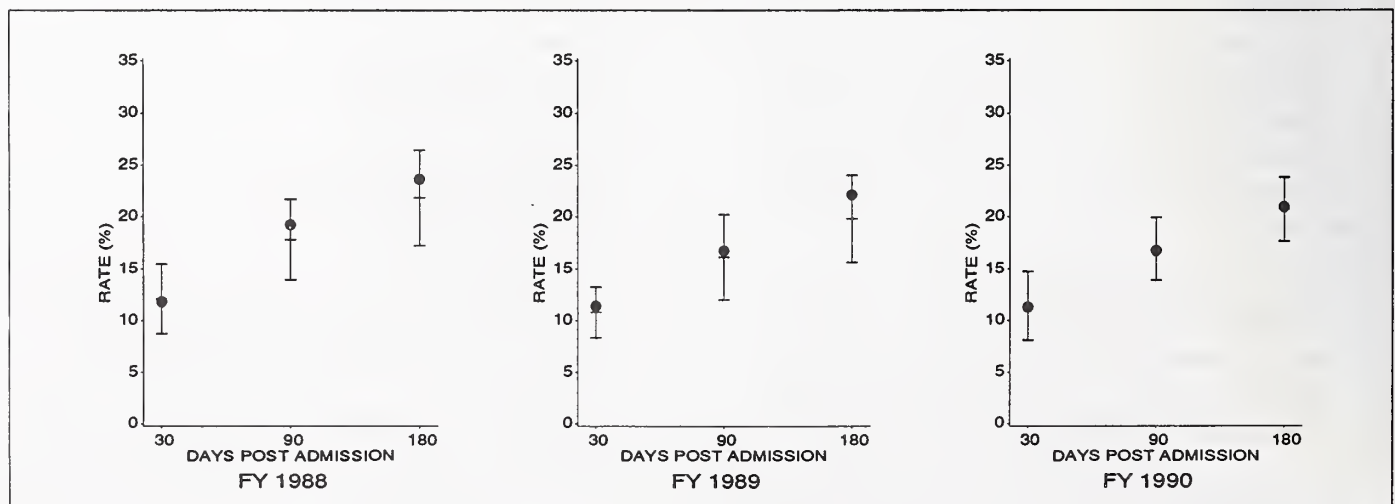
135 S PROSPECT ST  
YPSILANTI, MI 48198  
Medicare Provider Number: 230144

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 723             | 11.3                | 11.4 | 1.7   | 16.7    | 16.9 | 1.5   | 20.9     | 20.7 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 21              | 33.3                | 27.2 | ----- | 42.9    | 30.7 | ----- | 47.6     | 33.6 | ----- |
| Congestive Heart Failure.....              | 60              | 16.7                | 13.3 | 8.7   | 28.3    | 20.9 | 10.5  | 33.3     | 26.7 | 9.8   |
| Pneumonia/Influenza.....                   | 33              | 12.1                | 20.6 | ----- | 18.2    | 27.0 | ----- | 30.3     | 31.4 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 21              | 9.5                 | 11.2 | ----- | 9.5     | 19.1 | ----- | 14.3     | 25.1 | ----- |
| Transient Cerebral Ischemia.....           | 5               | 0.0                 | 3.3  | ----- | 0.0     | 7.3  | ----- | 0.0      | 12.0 | ----- |
| Stroke.....                                | 23              | 13.0                | 20.3 | ----- | 26.1    | 30.2 | ----- | 26.1     | 35.1 | ----- |
| Hip Fracture.....                          | 13              | 7.7                 | 6.6  | ----- | 15.4    | 11.6 | ----- | 15.4     | 14.8 | ----- |
| Sepsis.....                                | 26              | 38.5                | 25.0 | ----- | 46.2    | 32.5 | ----- | 46.2     | 36.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 6.2  | ----- | 0.0     | 12.1 | ----- | 0.0      | 16.1 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 7               | 0.0                 | 5.8  | ----- | 0.0     | 10.1 | ----- | 0.0      | 13.2 | ----- |
| Open Reduction of Hip Fracture.....        | 5               | 20.0                | 6.7  | ----- | 40.0    | 12.0 | ----- | 40.0     | 15.3 | ----- |
| Prostatectomy.....                         | 17              | 0.0                 | 1.2  | ----- | 0.0     | 2.9  | ----- | 5.9      | 5.1  | ----- |
| Cholecystectomy.....                       | 18              | 0.0                 | 1.5  | ----- | 5.6     | 2.5  | ----- | 5.6      | 3.2  | ----- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BEYER MEMORIAL HOSPITAL

Medicare Provider Number: 230144

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.9 years

Proportion female..... 64.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.1 %

Transferred from skilled nursing facility..... 0.6 %

Admitted for elective procedure..... 15.2 %

Admitted for emergency..... 69.2 %

### COMORBIDITIES:

Cancer..... 5.0 %

Chronic cardiovascular disease..... 53.9 %

Chronic liver disease..... 0.8 %

Chronic renal disease..... 3.3 %

Chronic pulmonary disease..... 20.6 %

Cerebrovascular degeneration..... 9.5 %

Diabetes mellitus..... 10.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 58.9%

State ..... 38.2%

Outside State ..... 2.9%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 78

Occupancy Rate ..... 60.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 42.5 %

Case Mix Index (CMI) ..... 1.1834

### STAFFING:

Total Number of Physicians..... 69

Percent of Physicians Board  
Certified Specialists..... 63.8 %

Medical Residents/Interns ..... 0

Registered Nurses..... 61

Licensed Practical Nurses ..... 25

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... Yes

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BI-COUNTY COMMUNITY HOSPITAL

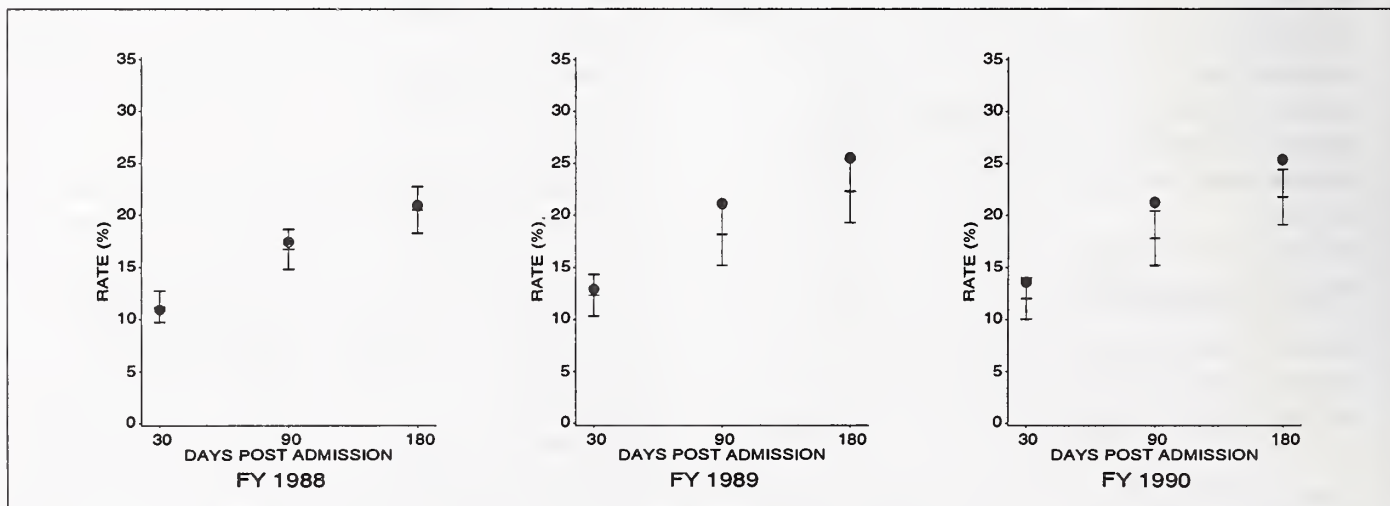
13355 E TEN MILE RD  
WARREN, MI 48089  
Medicare Provider Number: 230204

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1952            | 13.6                | 12.0 | 1.0  | 21.2    | 17.8 | 1.3  | 25.3     | 21.7 | 1.3  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 77              | 26.0                | 30.2 | 7.2  | 35.1    | 33.6 | 8.1  | 37.7     | 36.5 | 6.2  |
| Congestive Heart Failure.....              | 168             | 11.9                | 15.0 | 4.8  | 21.4    | 23.8 | 4.9  | 27.4     | 30.1 | 4.5  |
| Pneumonia/Influenza.....                   | 103             | 23.3                | 18.5 | 6.0  | 34.0    | 24.7 | 8.4  | 39.8     | 29.0 | 9.5  |
| Chronic Obstructive Pulmonary Disease..... | 25              | 8.0                 | 8.0  | ---- | 16.0    | 13.3 | ---- | 16.0     | 17.8 | ---- |
| Transient Cerebral Ischemia.....           | 62              | 4.8                 | 2.6  | 2.8  | 8.1     | 5.4  | 3.7  | 9.7      | 8.2  | 4.6  |
| Stroke.....                                | 101             | 27.7                | 21.4 | 6.2  | 32.7    | 28.9 | 5.2  | 35.6     | 33.0 | 5.0  |
| Hip Fracture.....                          | 53              | 15.1                | 6.8  | 6.5  | 20.8    | 11.9 | 7.1  | 24.5     | 15.4 | 7.3  |
| Sepsis.....                                | 14              | 7.1                 | 36.5 | ---- | 21.4    | 44.5 | ---- | 35.7     | 49.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 5.8  | ---- | 10.0    | 10.3 | ---- | 10.0     | 13.6 | ---- |
| Carotid Endarterectomy.....                | 18              | 0.0                 | 1.9  | ---- | 5.6     | 3.3  | ---- | 5.6      | 4.6  | ---- |
| Hip Replacement/Reconstruction.....        | 42              | 7.1                 | 4.3  | ---- | 7.1     | 7.8  | ---- | 11.9     | 10.1 | ---- |
| Open Reduction of Hip Fracture.....        | 26              | 15.4                | 5.7  | ---- | 26.9    | 10.3 | ---- | 30.8     | 13.8 | ---- |
| Prostatectomy.....                         | 46              | 0.0                 | 0.9  | ---- | 2.2     | 2.1  | ---- | 2.2      | 3.5  | ---- |
| Cholecystectomy.....                       | 30              | 6.7                 | 2.7  | ---- | 10.0    | 4.8  | ---- | 10.0     | 6.2  | ---- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.3  | ---- | 0.0     | 0.6  | ---- | 0.0      | 0.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BI-COUNTY COMMUNITY HOSPITAL

Medicare Provider Number: 230204

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years  
Proportion female..... 58.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.9 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 13.6 %  
Admitted for emergency..... 75.1 %

### COMORBIDITIES:

Cancer..... 9.5 %  
Chronic cardiovascular disease..... 46.4 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 3.6 %  
Chronic pulmonary disease..... 17.7 %  
Cerebrovascular degeneration..... 5.2 %  
Diabetes mellitus..... 7.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 74.7%  
State ..... 23.9%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 179  
Occupancy Rate ..... 79.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 47.2 %  
Case Mix Index (CMI) ..... 1.2700

### STAFFING:

Total Number of Physicians..... 138  
Percent of Physicians Board  
Certified Specialists..... 71.0 %  
Medical Residents/Interns ..... 47  
Registered Nurses..... 134  
Licensed Practical Nurses ..... 9

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used In calculating mortality rates

# BLODGETT MEMORIAL MEDICAL CENTER

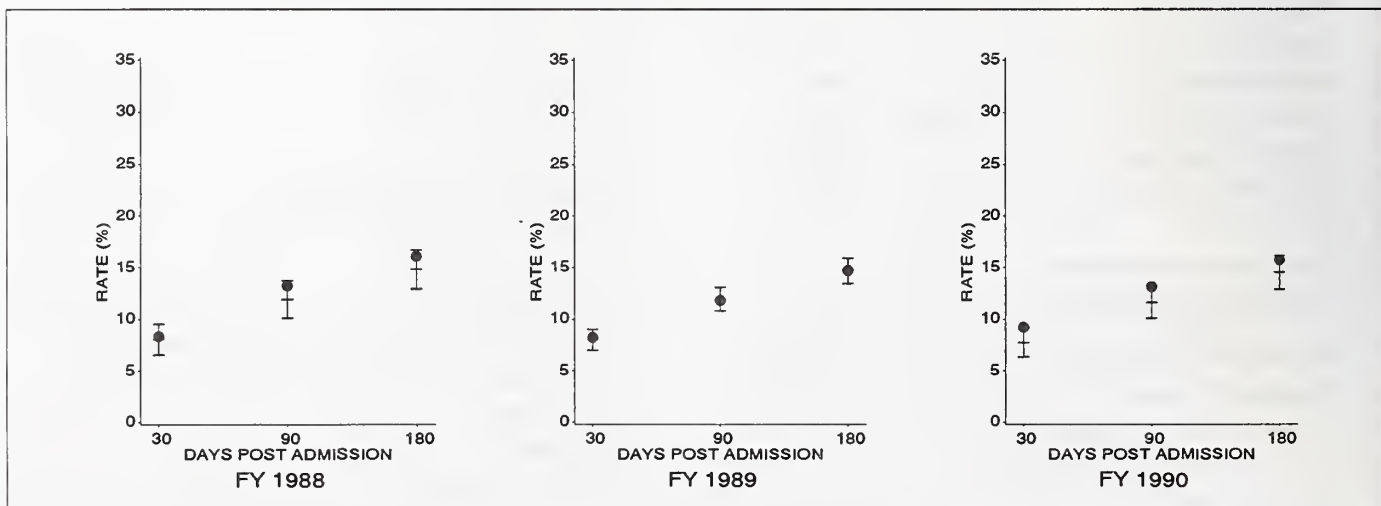
1840 WEALTHY ST S E  
GRAND RAPIDS, MI 49506  
Medicare Provider Number: 230032

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3429            | 9.2                 | 7.7  | 0.7  | 13.1    | 11.6 | 0.8  | 15.7     | 14.5 | 0.8  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 125             | 19.2                | 24.0 | 5.5  | 21.6    | 26.7 | 6.3  | 22.4     | 29.2 | 6.9  |
| Congestive Heart Failure.....              | 125             | 23.2                | 14.3 | 4.0  | 32.0    | 22.6 | 4.6  | 43.2     | 28.6 | 5.8  |
| Pneumonia/Influenza.....                   | 116             | 17.2                | 17.2 | 5.6  | 26.7    | 23.5 | 6.8  | 31.0     | 27.5 | 5.8  |
| Chronic Obstructive Pulmonary Disease..... | 20              | 10.0                | 8.0  | ---- | 15.0    | 13.7 | ---- | 30.0     | 18.2 | ---- |
| Transient Cerebral Ischemia.....           | 28              | 0.0                 | 2.0  | ---- | 0.0     | 4.4  | ---- | 0.0      | 7.1  | ---- |
| Stroke.....                                | 88              | 25.0                | 20.3 | 6.2  | 35.2    | 26.5 | 8.7  | 42.0     | 30.0 | 9.2  |
| Hip Fracture.....                          | 101             | 5.9                 | 5.9  | 2.8  | 5.9     | 10.5 | 4.3  | 8.9      | 13.7 | 4.9  |
| Sepsis.....                                | 22              | 18.2                | 29.6 | ---- | 31.8    | 36.6 | ---- | 36.4     | 40.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 127             | 0.8                 | 2.3  | 1.7  | 1.6     | 3.2  | 1.8  | 3.1      | 4.0  | 1.8  |
| Coronary Artery Bypass Graft.....          | 199             | 7.5                 | 4.9  | 2.4  | 8.5     | 7.0  | 2.3  | 9.0      | 8.0  | 2.2  |
| Initial Pacemaker Insertion.....           | 26              | 3.8                 | 2.1  | ---- | 3.8     | 4.3  | ---- | 3.8      | 6.7  | ---- |
| Carotid Endarterectomy.....                | 45              | 2.2                 | 1.8  | ---- | 4.4     | 3.2  | ---- | 4.4      | 4.5  | ---- |
| Hip Replacement/Reconstruction.....        | 173             | 1.7                 | 1.6  | 1.1  | 3.5     | 2.9  | 1.7  | 4.6      | 4.0  | 1.8  |
| Open Reduction of Hip Fracture.....        | 52              | 0.0                 | 5.7  | 6.4  | 0.0     | 10.5 | 10.9 | 1.9      | 13.7 | 12.1 |
| Prostatectomy.....                         | 120             | 0.8                 | 1.1  | 1.5  | 4.2     | 2.6  | 2.3  | 10.0     | 4.4  | 2.9  |
| Cholecystectomy.....                       | 68              | 7.4                 | 2.7  | 4.4  | 8.8     | 4.7  | 4.6  | 8.8      | 6.2  | 4.6  |
| Hysterectomy.....                          | 29              | 3.4                 | 0.7  | ---- | 3.4     | 1.5  | ---- | 3.4      | 2.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BLODGETT MEMORIAL MEDICAL CENTER

Medicare Provider Number: 230032

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.6 years  
Proportion female..... 53.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 53.9 %  
Transferred from skilled nursing facility..... 0.6 %  
Admitted for elective procedure..... 36.7 %  
Admitted for emergency..... 44.6 %

### COMORBIDITIES:

Cancer..... 6.4 %  
Chronic cardiovascular disease..... 44.7 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 2.0 %  
Chronic pulmonary disease..... 14.2 %  
Cerebrovascular degeneration..... 2.9 %  
Diabetes mellitus..... 7.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 64.5%  
State ..... 33.2%  
Outside State ..... 2.3%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 343  
Occupancy Rate ..... 68.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 32.8 %  
Case Mix Index (CMI) ..... 1.7240

### STAFFING:

Total Number of Physicians..... 253  
Percent of Physicians Board  
Certified Specialists ..... 96.0 %  
Medical Residents/Interns ..... 86  
Registered Nurses..... 691  
Licensed Practical Nurses..... 73

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BON SECOURS HOSPITAL

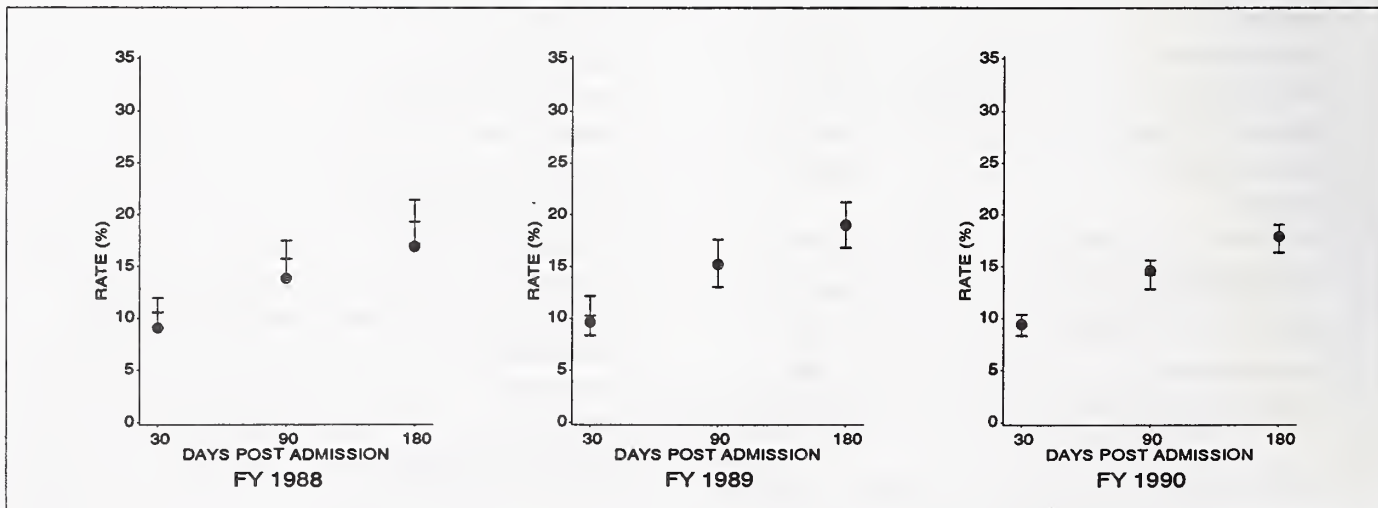
468 CADIEUX RD  
GROSSE POINTE, MI 48230  
Medicare Provider Number: 230089

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3399            | 9.4                 | 9.3  | 0.5  | 14.6    | 14.2 | 0.7  | 17.9     | 17.7 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 98              | 31.6                | 25.4 | 7.2  | 36.7    | 29.5 | 8.1  | 38.8     | 32.7 | 8.0  |
| Congestive Heart Failure.....              | 217             | 17.5                | 16.1 | 3.2  | 26.3    | 24.9 | 3.3  | 33.6     | 31.2 | 3.9  |
| Pneumonia/Influenza.....                   | 157             | 12.7                | 17.2 | 5.1  | 19.1    | 23.0 | 5.1  | 26.1     | 26.9 | 4.3  |
| Chronic Obstructive Pulmonary Disease..... | 55              | 0.0                 | 9.4  | 10.8 | 10.9    | 15.5 | 8.1  | 20.0     | 20.0 | 6.9  |
| Transient Cerebral Ischemia.....           | 66              | 6.1                 | 2.2  | 4.1  | 9.1     | 5.0  | 5.1  | 13.6     | 8.0  | 6.4  |
| Stroke.....                                | 146             | 19.2                | 21.2 | 6.1  | 23.3    | 30.0 | 8.3  | 29.5     | 34.3 | 8.5  |
| Hip Fracture.....                          | 107             | 10.3                | 7.6  | 5.8  | 17.8    | 13.4 | 6.9  | 21.5     | 17.3 | 6.8  |
| Sepsis.....                                | 50              | 36.0                | 26.8 | ---- | 52.0    | 35.6 | ---- | 58.0     | 41.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 29              | 3.4                 | 2.8  | ---- | 10.3    | 6.1  | ---- | 10.3     | 9.1  | ---- |
| Carotid Endarterectomy.....                | 47              | 0.0                 | 1.2  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.4  | ---- |
| Hip Replacement/Reconstruction.....        | 95              | 3.2                 | 2.8  | 2.1  | 5.3     | 5.0  | 2.6  | 7.4      | 6.6  | 2.6  |
| Open Reduction of Hip Fracture.....        | 54              | 11.1                | 7.3  | 7.8  | 20.4    | 13.3 | 8.9  | 22.2     | 17.3 | 9.9  |
| Prostatectomy.....                         | 143             | 0.0                 | 0.9  | 1.5  | 2.1     | 2.0  | 1.4  | 4.2      | 3.4  | 1.9  |
| Cholecystectomy.....                       | 61              | 1.6                 | 2.0  | 2.0  | 4.9     | 3.7  | 3.2  | 8.2      | 5.1  | 4.5  |
| Hysterectomy.....                          | 40              | 0.0                 | 0.6  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BON SECOURS HOSPITAL

Medicare Provider Number: 230089

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.6 years  
Proportion female..... 60.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 42.1 %  
Transferred from skilled nursing facility..... 2.1 %  
Admitted for elective procedure..... 38.4 %  
Admitted for emergency..... 60.7 %

### COMORBIDITIES:

Cancer..... 7.2 %  
Chronic cardiovascular disease..... 48.5 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.9 %  
Chronic pulmonary disease..... 13.4 %  
Cerebrovascular degeneration..... 4.0 %  
Diabetes mellitus..... 7.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 52.6%  
State..... 45.8%  
Outside State..... 1.6%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 8.4 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 469  
Occupancy Rate..... 82.0 %  
Ownership/Control..... Church  
Medicare Discharges..... 46.0 %  
Case Mix Index (CMI)..... 1.3222

### STAFFING:

Total Number of Physicians..... 214  
Percent of Physicians Board  
Certified Specialists..... 82.2 %  
Medical Residents/Interns..... 27  
Registered Nurses..... 195  
Licensed Practical Nurses..... 62

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... Yes  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# BORGESS MEDICAL CENTER

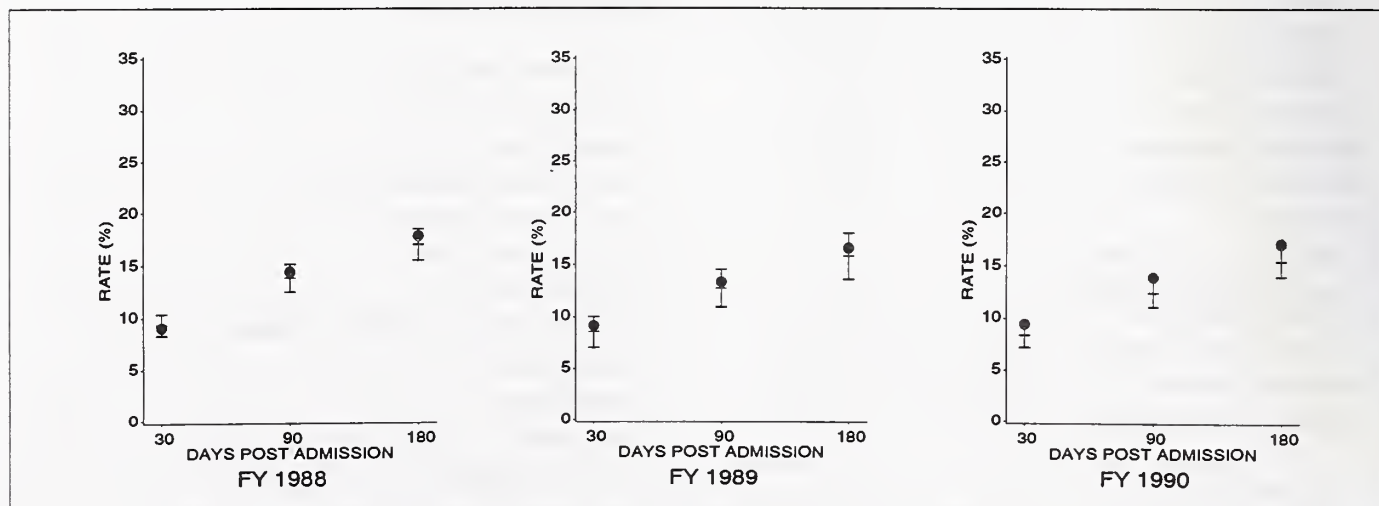
1521 GULL ROAD  
KALAMAZOO, MI 49001  
Medicare Provider Number: 230117

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3722            | 9.4                 | 8.3  | 0.6  | 13.9    | 12.4 | 0.7  | 17.1     | 15.4 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 156             | 16.0                | 23.7 | 4.2  | 17.9    | 26.0 | 4.4  | 19.2     | 28.2 | 4.6  |
| Congestive Heart Failure.....              | 190             | 15.8                | 13.9 | 5.4  | 23.7    | 21.8 | 5.6  | 28.9     | 27.7 | 5.0  |
| Pneumonia/Influenza.....                   | 37              | 18.9                | 16.1 | ---- | 27.0    | 22.5 | ---- | 32.4     | 25.9 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 32              | 31.3                | 9.6  | ---- | 34.4    | 16.6 | ---- | 43.8     | 21.3 | ---- |
| Transient Cerebral Ischemia.....           | 34              | 5.9                 | 2.0  | ---- | 8.8     | 4.6  | ---- | 14.7     | 7.4  | ---- |
| Stroke.....                                | 128             | 27.3                | 19.7 | 5.6  | 33.6    | 25.8 | 6.2  | 36.7     | 29.3 | 6.6  |
| Hip Fracture.....                          | 88              | 10.2                | 7.0  | 3.6  | 15.9    | 12.1 | 4.8  | 20.5     | 15.3 | 6.4  |
| Sepsis.....                                | 24              | 29.2                | 20.7 | ---- | 37.5    | 27.9 | ---- | 41.7     | 32.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 286             | 3.5                 | 3.2  | 1.1  | 5.6     | 3.9  | 1.5  | 6.6      | 4.7  | 1.5  |
| Coronary Artery Bypass Graft.....          | 176             | 6.3                 | 4.9  | 2.0  | 8.0     | 6.6  | 2.1  | 11.9     | 7.5  | 2.8  |
| Initial Pacemaker Insertion.....           | 65              | 3.1                 | 2.4  | 2.0  | 4.6     | 4.8  | 2.9  | 4.6      | 7.0  | 3.8  |
| Carotid Endarterectomy.....                | 68              | 1.5                 | 1.3  | 1.4  | 1.5     | 2.5  | 2.1  | 1.5      | 3.6  | 2.8  |
| Hip Replacement/Reconstruction.....        | 106             | 3.8                 | 2.1  | 1.8  | 6.6     | 3.7  | 2.9  | 8.5      | 5.0  | 3.7  |
| Open Reduction of Hip Fracture.....        | 42              | 9.5                 | 7.1  | ---- | 19.0    | 12.4 | ---- | 23.8     | 16.0 | ---- |
| Prostatectomy.....                         | 66              | 0.0                 | 1.0  | 1.5  | 3.0     | 2.3  | 2.1  | 6.1      | 4.0  | 3.1  |
| Cholecystectomy.....                       | 90              | 2.2                 | 2.5  | 1.7  | 5.6     | 4.7  | 2.3  | 6.7      | 6.4  | 3.3  |
| Hysterectomy.....                          | 22              | 0.0                 | 0.8  | ---- | 0.0     | 1.9  | ---- | 4.5      | 2.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BORGESS MEDICAL CENTER

Medicare Provider Number: 230117

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.0 years  
Proportion female..... 52.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 45.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 32.2 %  
Admitted for emergency..... 48.9 %

### COMORBIDITIES:

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 47.1 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 3.5 %  
Chronic pulmonary disease..... 13.3 %  
Cerebrovascular degeneration..... 3.0 %  
Diabetes mellitus..... 8.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 49.6%  
State ..... 47.7%  
Outside State ..... 2.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 375  
Occupancy Rate ..... 77.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 39.4 %  
Case Mix Index (CMI) ..... 1.7713

### STAFFING:

Total Number of Physicians..... 374  
Percent of Physicians Board  
Certified Specialists..... 76.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 518  
Licensed Practical Nurses ..... 90

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... Yes  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BOTSFORD GENERAL HOSPITAL

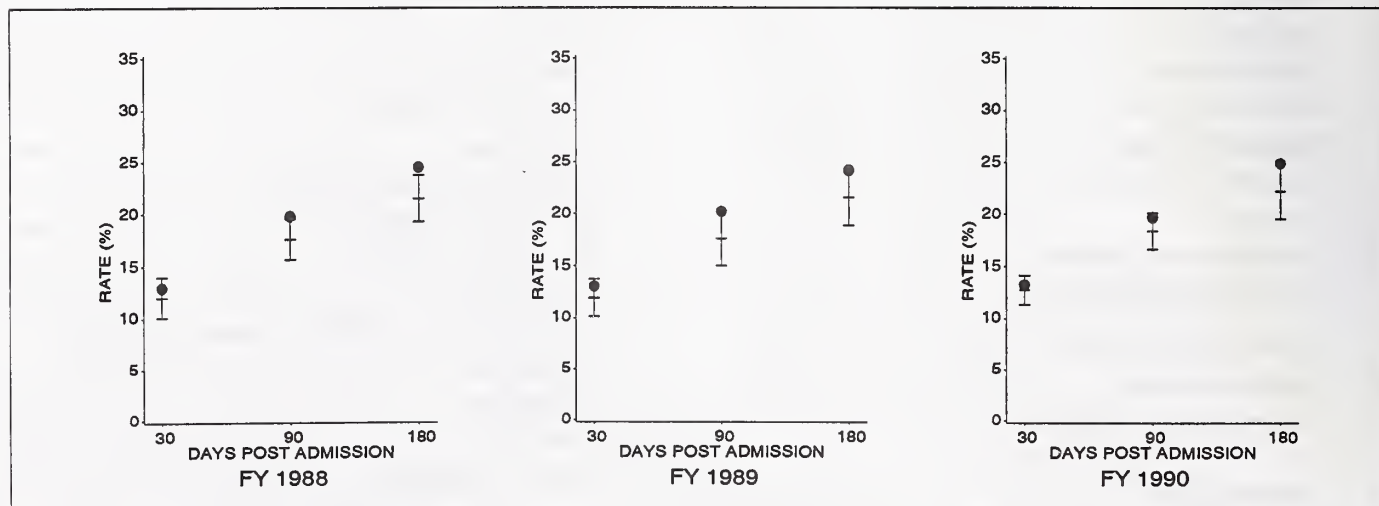
28050 GRAND ST  
FARMINGTON, MI 48024  
Medicare Provider Number: 230151

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2546               | 13.2                | 12.7 | 0.7  | 19.7    | 18.4 | 0.9  | 24.9     | 22.2 | 1.3  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 96                 | 33.3                | 28.5 | 6.1  | 35.4    | 31.6 | 6.1  | 39.6     | 34.2 | 6.6  |
| Congestive Heart Failure.....              | 101                | 19.8                | 14.3 | 5.5  | 27.7    | 22.5 | 5.2  | 34.7     | 28.8 | 5.7  |
| Pneumonia/Influenza.....                   | 110                | 14.5                | 15.6 | 3.6  | 19.1    | 21.6 | 4.1  | 27.3     | 25.5 | 4.4  |
| Chronic Obstructive Pulmonary Disease..... | 26                 | 19.2                | 14.8 | ---- | 23.1    | 22.7 | ---- | 34.6     | 28.2 | ---- |
| Transient Cerebral Ischemia.....           | 24                 | 0.0                 | 1.6  | ---- | 0.0     | 3.4  | ---- | 0.0      | 5.5  | ---- |
| Stroke.....                                | 124                | 27.4                | 21.7 | 5.3  | 37.1    | 28.6 | 6.9  | 42.7     | 32.4 | 7.6  |
| Hip Fracture.....                          | 68                 | 8.8                 | 7.4  | 3.7  | 11.8    | 12.7 | 5.6  | 20.6     | 16.3 | 6.1  |
| Sepsis.....                                | 16                 | 18.8                | 31.6 | ---- | 50.0    | 43.7 | ---- | 50.0     | 49.5 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 33                 | 9.1                 | 3.3  | ---- | 15.2    | 7.1  | ---- | 21.2     | 10.6 | ---- |
| Carotid Endarterectomy.....                | 2                  | 0.0                 | 1.2  | ---- | 0.0     | 2.2  | ---- | 0.0      | 3.3  | ---- |
| Hip Replacement/Reconstruction.....        | 62                 | 3.2                 | 2.7  | 2.3  | 4.8     | 5.1  | 4.4  | 8.1      | 6.9  | 5.0  |
| Open Reduction of Hip Fracture.....        | 43                 | 7.0                 | 6.8  | ---- | 9.3     | 11.9 | ---- | 16.3     | 15.5 | ---- |
| Prostatectomy.....                         | 78                 | 0.0                 | 0.6  | 1.0  | 1.3     | 1.4  | 1.5  | 1.3      | 2.4  | 2.0  |
| Cholecystectomy.....                       | 58                 | 1.7                 | 2.8  | 3.3  | 6.9     | 5.2  | 4.1  | 8.6      | 6.9  | 4.9  |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.5  | ---- | 0.0     | 1.1  | ---- | 0.0      | 1.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BOTSFORD GENERAL HOSPITAL

Medicare Provider Number: 230151

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.5 years  
Proportion female..... 58.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 18.1 %  
Admitted for emergency..... 75.9 %

### COMORBIDITIES:

Cancer..... 8.9 %  
Chronic cardiovascular disease..... 44.2 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 2.9 %  
Chronic pulmonary disease..... 21.0 %  
Cerebrovascular degeneration..... 3.3 %  
Diabetes mellitus..... 6.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 27.9%  
State ..... 70.0%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 305  
Occupancy Rate ..... 72.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 45.5 %  
Case Mix Index (CMI) ..... 1.3878

### STAFFING:

Total Number of Physicians..... 369  
Percent of Physicians Board  
Certified Specialists ..... 69.1 %  
Medical Residents/Interns ..... 110  
Registered Nurses..... 288  
Licensed Practical Nurses ..... 42

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BRONSON METHODIST HOSPITAL

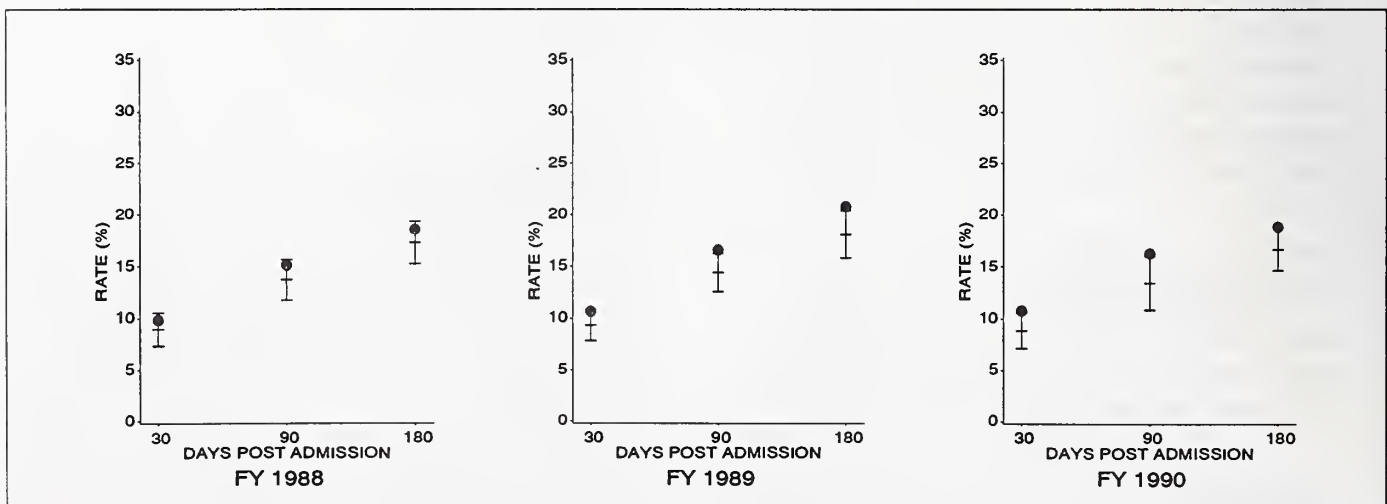
252 EAST LOVELL STREET  
KALAMAZOO, MI 49006  
Medicare Provider Number: 230017

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2540            | 10.7                | 8.8  | 0.8   | 16.3    | 13.4 | 1.3   | 18.9     | 16.7 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 97              | 22.7                | 23.0 | 4.3   | 26.8    | 26.2 | 4.5   | 26.8     | 28.8 | 4.9   |
| Congestive Heart Failure.....              | 105             | 20.0                | 14.2 | 5.4   | 24.8    | 22.5 | 5.0   | 29.5     | 28.4 | 4.8   |
| Pneumonia/Influenza.....                   | 112             | 23.2                | 15.6 | 5.0   | 33.0    | 21.4 | 6.3   | 38.4     | 25.2 | 6.6   |
| Chronic Obstructive Pulmonary Disease..... | 17              | 0.0                 | 8.4  | ----- | 0.0     | 13.2 | ----- | 5.9      | 17.5 | ----- |
| Transient Cerebral Ischemia.....           | 22              | 4.5                 | 1.8  | ----- | 4.5     | 4.0  | ----- | 4.5      | 6.2  | ----- |
| Stroke.....                                | 93              | 24.7                | 23.1 | 4.8   | 33.3    | 29.9 | 5.8   | 36.6     | 33.6 | 6.1   |
| Hip Fracture.....                          | 99              | 10.1                | 7.0  | 4.8   | 21.2    | 12.6 | 7.0   | 21.2     | 16.5 | 5.7   |
| Sepsis.....                                | 32              | 15.6                | 20.3 | ----- | 25.0    | 25.7 | ----- | 25.0     | 29.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 47              | 6.4                 | 4.1  | ----- | 10.6    | 5.1  | ----- | 12.8     | 6.2  | ----- |
| Coronary Artery Bypass Graft.....          | 65              | 7.7                 | 6.2  | 3.7   | 10.8    | 8.7  | 4.4   | 10.8     | 9.8  | 4.6   |
| Initial Pacemaker Insertion.....           | 17              | 0.0                 | 3.9  | ----- | 5.9     | 8.2  | ----- | 5.9      | 11.9 | ----- |
| Carotid Endarterectomy.....                | 16              | 0.0                 | 1.4  | ----- | 0.0     | 2.5  | ----- | 6.3      | 3.6  | ----- |
| Hip Replacement/Reconstruction.....        | 76              | 7.9                 | 2.3  | 3.2   | 10.5    | 4.5  | 3.7   | 10.5     | 6.4  | 4.2   |
| Open Reduction of Hip Fracture.....        | 59              | 6.8                 | 6.4  | 5.6   | 18.6    | 12.0 | 7.2   | 18.6     | 16.2 | 6.5   |
| Prostatectomy.....                         | 106             | 0.9                 | 1.0  | 1.3   | 3.8     | 2.3  | 2.0   | 5.7      | 3.9  | 2.9   |
| Cholecystectomy.....                       | 59              | 3.4                 | 3.0  | 2.8   | 8.5     | 5.2  | 4.2   | 8.5      | 6.7  | 4.9   |
| Hysterectomy.....                          | 29              | 0.0                 | 0.7  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BRONSON METHODIST HOSPITAL

Medicare Provider Number: 230017

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.8 years

Proportion female..... 56.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 52.6 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 27.8 %

Admitted for emergency..... 56.1 %

### COMORBIDITIES:

Cancer..... 8.3 %

Chronic cardiovascular disease..... 35.6 %

Chronic liver disease..... 1.1 %

Chronic renal disease..... 3.5 %

Chronic pulmonary disease..... 14.3 %

Cerebrovascular degeneration..... 4.6 %

Diabetes mellitus..... 8.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 69.0%

State ..... 28.2%

Outside State ..... 2.8%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 456

Occupancy Rate ..... 57.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 23.7 %

Case Mix Index (CMI) ..... 1.5272

### STAFFING:

Total Number of Physicians..... 377

Percent of Physicians Board  
Certified Specialists..... 73.5 %

Medical Residents/Interns ..... 0

Registered Nurses..... 622

Licensed Practical Nurses ..... 62

### SPECIALTY SERVICES:

Burn Unit ..... Yes

Cardiac Intensive Care ..... Yes

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BRONSON VICKSBURG HOSPITAL

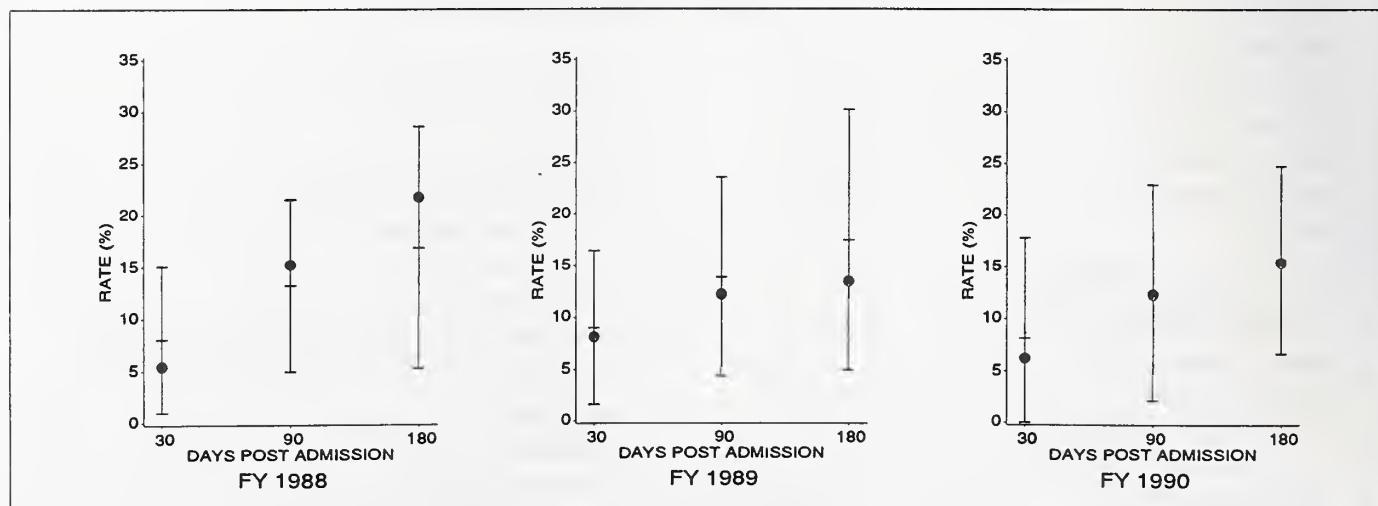
13226 NORTH BLVD  
VICKSBURG, MI 49097  
Medicare Provider Number: 230190

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 65              | 6.2                 | 8.1  | 4.9  | 12.3    | 12.5 | 5.2  | 15.4     | 15.7 | 4.5  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Congestive Heart Failure.....              | 3               | 33.3                | 13.1 | ---- | 33.3    | 20.9 | ---- | 66.7     | 26.4 | ---- |
| Pneumonia/Influenza.....                   | 14              | 0.0                 | 13.9 | ---- | 7.1     | 19.3 | ---- | 14.3     | 23.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 2               | 50.0                | 10.5 | ---- | 50.0    | 16.9 | ---- | 50.0     | 21.5 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 1.6  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.8  | ---- |
| Stroke.....                                | 4               | 0.0                 | 16.7 | ---- | 25.0    | 25.7 | ---- | 25.0     | 30.9 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1               | 0.0                 | 4.8  | ---- | 0.0     | 6.5  | ---- | 0.0      | 8.4  | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 5               | 20.0                | 1.0  | ---- | 20.0    | 2.5  | ---- | 20.0     | 4.6  | ---- |
| Cholecystectomy.....                       | 0               |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# BRONSON VICKSBURG HOSPITAL

Medicare Provider Number: 230190

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 78.2 years  
Proportion female..... 56.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 52.3 %  
Transferred from skilled nursing facility..... 1.5 %  
Admitted for elective procedure..... 27.7 %  
Admitted for emergency..... 56.9 %

### COMORBIDITIES:

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 30.8 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 10.8 %  
Cerebrovascular degeneration..... 7.7 %  
Diabetes mellitus..... 9.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.0%  
State ..... 23.0%  
Outside State ..... 0.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 41  
Occupancy Rate ..... 46.0 %  
Ownership/Control..... Private, For Profit  
Medicare Discharges ..... 61.6 %  
Case Mix Index (CMI) ..... 1.0901

### STAFFING:

Total Number of Physicians..... 12  
Percent of Physicians Board  
Certified Specialists ..... 75.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 23  
Licensed Practical Nurses ..... 9

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# BUTTERWORTH HOSPITAL

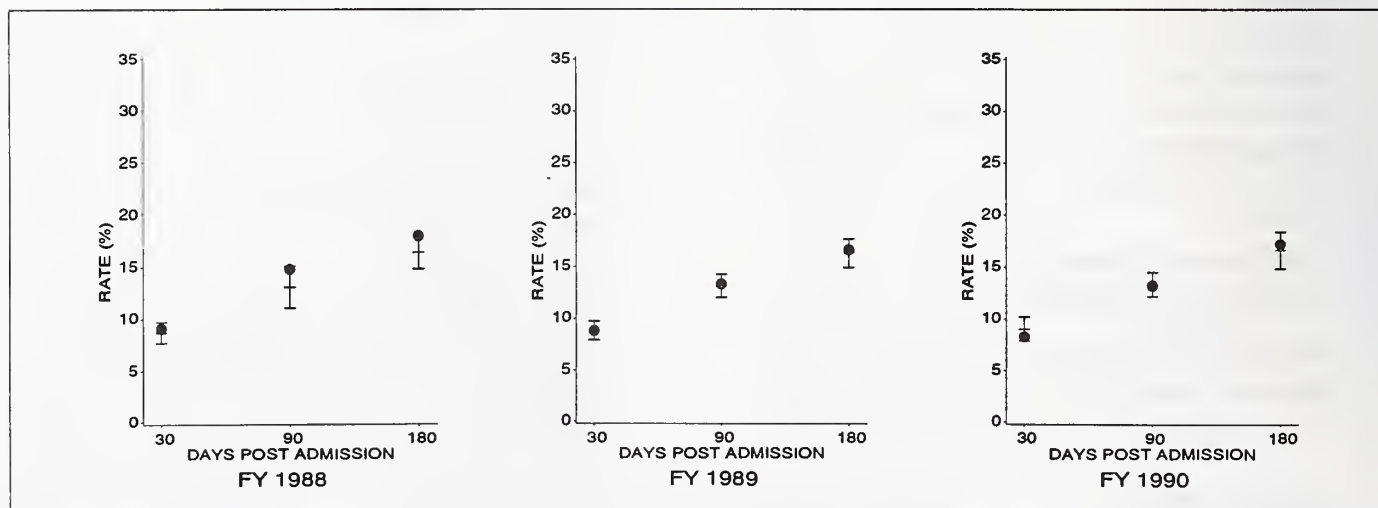
100 MICHIGAN N E  
GRAND RAPIDS, MI 49503  
Medicare Provider Number: 230038

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 4548            | 8.3                 | 9.0  | 0.6   | 13.2    | 13.3 | 0.6   | 17.2     | 16.6 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 161             | 18.6                | 27.1 | 4.6   | 24.2    | 29.8 | 5.3   | 27.3     | 32.3 | 5.1   |
| Congestive Heart Failure.....              | 178             | 14.6                | 14.1 | 4.2   | 25.3    | 22.2 | 4.4   | 31.5     | 28.2 | 4.1   |
| Pneumonia/Influenza.....                   | 181             | 16.6                | 17.3 | 3.5   | 22.1    | 23.5 | 4.1   | 27.6     | 27.5 | 4.5   |
| Chronic Obstructive Pulmonary Disease..... | 42              | 7.1                 | 12.4 | ----- | 21.4    | 20.1 | ----- | 28.6     | 25.0 | ----- |
| Transient Cerebral Ischemia.....           | 33              | 3.0                 | 1.7  | ----- | 6.1     | 3.6  | ----- | 6.1      | 5.7  | ----- |
| Stroke.....                                | 177             | 11.3                | 18.4 | 4.1   | 15.3    | 24.7 | 4.9   | 19.2     | 28.5 | 5.2   |
| Hip Fracture.....                          | 134             | 6.7                 | 7.7  | 2.9   | 9.7     | 13.5 | 4.4   | 14.2     | 17.4 | 4.3   |
| Sepsis.....                                | 29              | 10.3                | 26.4 | ----- | 20.7    | 33.3 | ----- | 27.6     | 37.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 111             | 1.8                 | 2.8  | 2.0   | 3.6     | 3.6  | 2.1   | 5.4      | 4.4  | 2.1   |
| Coronary Artery Bypass Graft.....          | 159             | 9.4                 | 4.8  | 2.7   | 11.3    | 6.7  | 3.0   | 13.8     | 7.7  | 4.0   |
| Initial Pacemaker Insertion.....           | 46              | 0.0                 | 3.7  | ----- | 2.2     | 6.3  | ----- | 4.3      | 8.8  | ----- |
| Carotid Endarterectomy.....                | 62              | 0.0                 | 1.6  | 2.4   | 1.6     | 2.9  | 3.0   | 1.6      | 4.2  | 4.9   |
| Hip Replacement/Reconstruction.....        | 103             | 4.9                 | 4.0  | 2.4   | 5.8     | 7.1  | 3.9   | 7.8      | 9.3  | 3.8   |
| Open Reduction of Hip Fracture.....        | 72              | 4.2                 | 6.7  | 3.3   | 8.3     | 12.2 | 4.7   | 12.5     | 16.3 | 4.9   |
| Prostatectomy.....                         | 254             | 0.8                 | 0.7  | 0.5   | 1.6     | 1.6  | 0.8   | 2.8      | 2.7  | 1.5   |
| Cholecystectomy.....                       | 118             | 2.5                 | 2.3  | 1.7   | 3.4     | 4.3  | 2.2   | 5.9      | 5.9  | 3.0   |
| Hysterectomy.....                          | 39              | 0.0                 | 0.3  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) Is not calculated if the number of deaths or cases Is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# BUTTERWORTH HOSPITAL

Medicare Provider Number: 230038

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.0 years  
Proportion female..... 51.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.8 %  
Transferred from skilled nursing facility..... 1.1 %  
Admitted for elective procedure..... 36.9 %  
Admitted for emergency..... 55.4 %

### COMORBIDITIES:

Cancer..... 8.0 %  
Chronic cardiovascular disease..... 37.2 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 1.7 %  
Chronic pulmonary disease..... 11.4 %  
Cerebrovascular degeneration..... 3.2 %  
Diabetes mellitus..... 7.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 67.8%  
State ..... 30.2%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.6 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 529  
Occupancy Rate ..... 78.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.8 %  
Case Mix Index (CMI) ..... 1.4941

### STAFFING:

Total Number of Physicians..... 375  
Percent of Physicians Board  
Certified Specialists..... 75.7 %  
Medical Residents/Interns ..... 96  
Registered Nurses..... 805  
Licensed Practical Nurses..... 71

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# CALUMET PUBLIC HOSPITAL

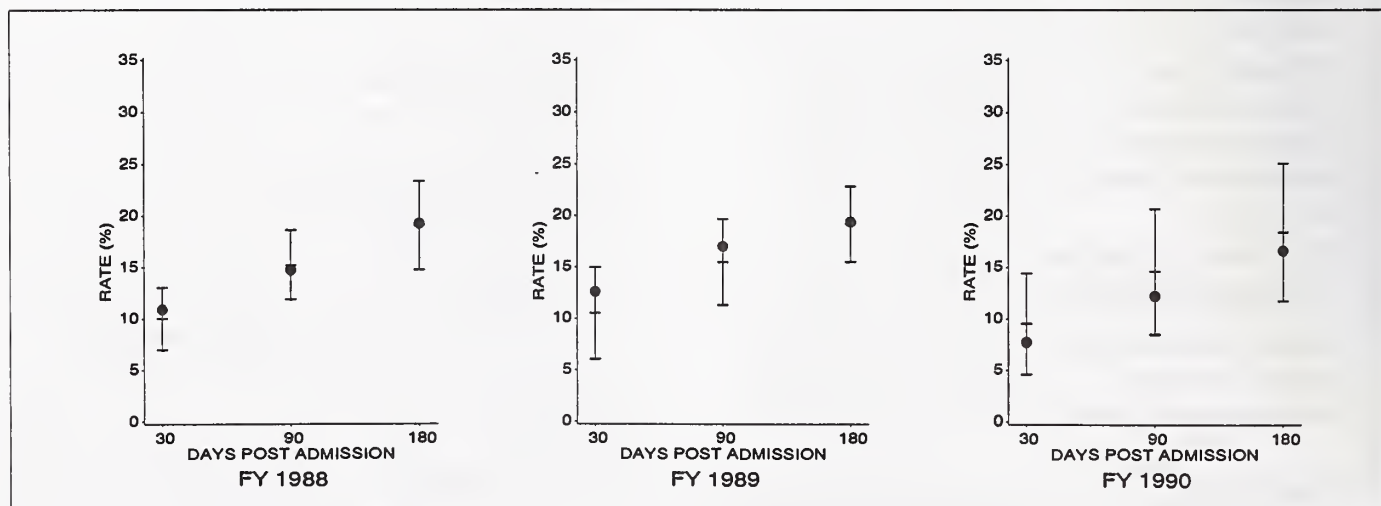
205 OSCEOLA STREET  
LAURIUM, MI 49913  
Medicare Provider Number: 230145

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 452                | 7.7                 | 9.5  | 2.5  | 12.2    | 14.6 | 3.0  | 16.6     | 18.4 | 3.3  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 12                 | 25.0                | 22.4 | ---- | 33.3    | 25.6 | ---- | 33.3     | 28.3 | ---- |
| Congestive Heart Failure.....              | 24                 | 12.5                | 16.0 | ---- | 16.7    | 24.2 | ---- | 25.0     | 30.2 | ---- |
| Pneumonia/Influenza.....                   | 27                 | 7.4                 | 16.1 | ---- | 11.1    | 22.1 | ---- | 18.5     | 26.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 9                  | 0.0                 | 9.8  | ---- | 22.2    | 16.9 | ---- | 22.2     | 21.9 | ---- |
| Transient Cerebral Ischemia.....           | 3                  | 0.0                 | 1.8  | ---- | 0.0     | 4.0  | ---- | 0.0      | 6.4  | ---- |
| Stroke.....                                | 33                 | 9.1                 | 12.3 | ---- | 12.1    | 18.0 | ---- | 15.2     | 21.4 | ---- |
| Hip Fracture.....                          | 10                 | 10.0                | 6.1  | ---- | 10.0    | 10.0 | ---- | 30.0     | 12.5 | ---- |
| Sepsis.....                                | 7                  | 14.3                | 20.8 | ---- | 28.6    | 31.5 | ---- | 42.9     | 37.1 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 3                  | 0.0                 | 3.1  | ---- | 33.3    | 5.6  | ---- | 33.3     | 7.5  | ---- |
| Open Reduction of Hip Fracture.....        | 9                  | 11.1                | 5.0  | ---- | 11.1    | 8.5  | ---- | 33.3     | 11.0 | ---- |
| Prostatectomy.....                         | 22                 | 0.0                 | 2.7  | ---- | 4.5     | 4.1  | ---- | 9.1      | 5.9  | ---- |
| Cholecystectomy.....                       | 17                 | 0.0                 | 2.9  | ---- | 0.0     | 4.7  | ---- | 0.0      | 5.9  | ---- |
| Hysterectomy.....                          | 6                  | 0.0                 | 1.1  | ---- | 0.0     | 2.6  | ---- | 0.0      | 4.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CALUMET PUBLIC HOSPITAL

Medicare Provider Number: 230145

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.3 years  
Proportion female..... 55.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 72.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.8 %  
Admitted for emergency..... 13.1 %

### COMORBIDITIES:

Cancer..... 8.0 %  
Chronic cardiovascular disease..... 52.0 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 12.8 %  
Cerebrovascular degeneration..... 8.6 %  
Diabetes mellitus..... 6.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.1%  
State ..... 20.5%  
Outside State ..... 2.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 48  
Occupancy Rate ..... 45.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 55.7 %  
Case Mix Index (CMI) ..... 1.1422

### STAFFING:

Total Number of Physicians..... 15  
Percent of Physicians Board  
Certified Specialists..... 66.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 39  
Licensed Practical Nurses..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# CARO COMMUNITY HOSPITAL

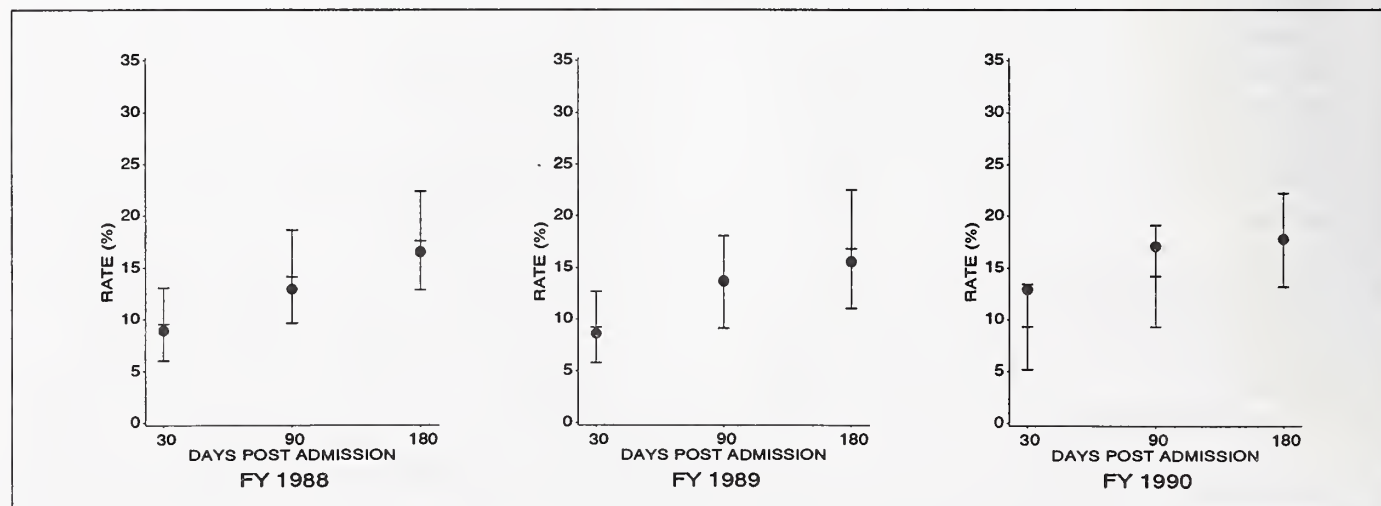
401 N HOOPER ST  
CARO, MI 48723  
Medicare Provider Number: 230235

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 287             | 12.9                | 9.3  | 2.1  | 17.1    | 14.2 | 2.5  | 17.8     | 17.7 | 2.3  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 11              | 18.2                | 21.9 | ---- | 18.2    | 25.8 | ---- | 18.2     | 28.8 | ---- |
| Congestive Heart Failure.....              | 19              | 21.1                | 17.2 | ---- | 31.6    | 26.7 | ---- | 31.6     | 33.6 | ---- |
| Pneumonia/Influenza.....                   | 14              | 28.6                | 17.1 | ---- | 42.9    | 23.4 | ---- | 42.9     | 27.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 8               | 0.0                 | 8.7  | ---- | 25.0    | 14.1 | ---- | 25.0     | 18.6 | ---- |
| Transient Cerebral Ischemia.....           | 9               | 11.1                | 2.4  | ---- | 11.1    | 5.7  | ---- | 11.1     | 9.2  | ---- |
| Stroke.....                                | 11              | 36.4                | 18.3 | ---- | 36.4    | 23.9 | ---- | 36.4     | 27.7 | ---- |
| Hip Fracture.....                          | 3               | 33.3                | 8.9  | ---- | 33.3    | 14.8 | ---- | 33.3     | 18.4 | ---- |
| Sepsis.....                                | 1               | 100.0               | 21.8 | ---- | 100.0   | 25.7 | ---- | 100.0    | 28.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 3               | 33.3                | 7.3  | ---- | 33.3    | 12.5 | ---- | 33.3     | 15.6 | ---- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 17              | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.7  | ---- |
| Cholecystectomy.....                       | 1               | 0.0                 | 5.1  | ---- | 0.0     | 7.7  | ---- | 0.0      | 9.5  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CARO COMMUNITY HOSPITAL

Medicare Provider Number: 230235

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years

Proportion female..... 59.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 38.7 %

Transferred from skilled nursing facility..... 0.7 %

Admitted for elective procedure..... 10.8 %

Admitted for emergency..... 1.0 %

### COMORBIDITIES:

Cancer..... 9.8 %

Chronic cardiovascular disease..... 45.6 %

Chronic liver disease..... 0.7 %

Chronic renal disease..... 2.4 %

Chronic pulmonary disease..... 11.5 %

Cerebrovascular degeneration..... 2.8 %

Diabetes mellitus..... 17.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 89.4%

State..... 9.1%

Outside State..... 1.5%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.1 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 44

Occupancy Rate..... 25.0 %

Ownership/Control..... Local Government

Medicare Discharges..... 49.7 %

Case Mix Index (CMI)..... 0.9905

### STAFFING:

Total Number of Physicians..... 14

Percent of Physicians Board  
Certified Specialists..... 85.7 %

Medical Residents/Interns..... 0

Registered Nurses..... 15

Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# CARSON CITY HOSPITAL

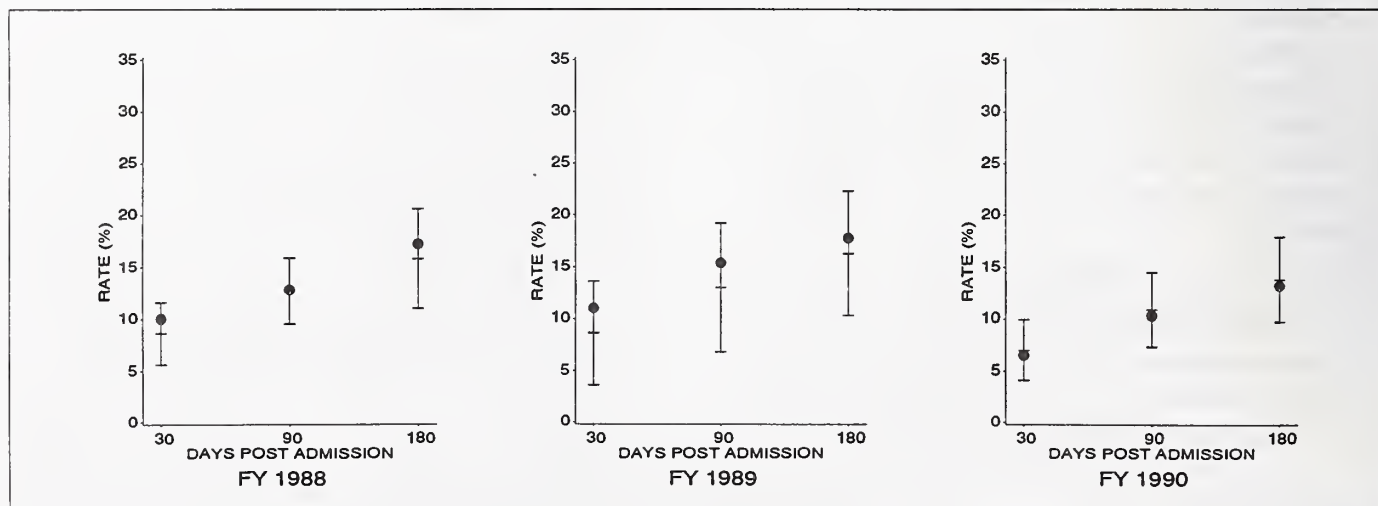
ELM AT 3RD ST  
CARSON CITY, MI 48811  
Medicare Provider Number: 230208

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 476                | 6.5                 | 7.0  | 1.5   | 10.3    | 10.9 | 1.8   | 13.2     | 13.8 | 2.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 13                 | 30.8                | 20.0 | ----- | 30.8    | 22.9 | ----- | 30.8     | 25.6 | ----- |
| Congestive Heart Failure.....              | 24                 | 4.2                 | 16.0 | ----- | 4.2     | 25.1 | ----- | 12.5     | 31.2 | ----- |
| Pneumonia/Influenza.....                   | 25                 | 4.0                 | 11.8 | ----- | 4.0     | 16.3 | ----- | 8.0      | 19.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 3                  | 66.7                | 2.9  | ----- | 66.7    | 5.7  | ----- | 66.7     | 8.1  | ----- |
| Transient Cerebral Ischemia.....           | 15                 | 0.0                 | 1.0  | ----- | 0.0     | 2.5  | ----- | 13.3     | 4.6  | ----- |
| Stroke.....                                | 16                 | 12.5                | 15.3 | ----- | 18.8    | 21.0 | ----- | 25.0     | 24.3 | ----- |
| Hip Fracture.....                          | 8                  | 0.0                 | 4.4  | ----- | 12.5    | 7.8  | ----- | 12.5     | 10.6 | ----- |
| Sepsis.....                                | 6                  | 16.7                | 19.6 | ----- | 16.7    | 28.8 | ----- | 33.3     | 34.0 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 2                  | 0.0                 | 2.8  | ----- | 0.0     | 7.0  | ----- | 0.0      | 11.5 | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 14                 | 0.0                 | 2.7  | ----- | 14.3    | 5.6  | ----- | 14.3     | 8.4  | ----- |
| Open Reduction of Hip Fracture.....        | 3                  | 0.0                 | 3.8  | ----- | 0.0     | 6.9  | ----- | 0.0      | 9.6  | ----- |
| Prostatectomy.....                         | 25                 | 8.0                 | 1.2  | ----- | 8.0     | 3.1  | ----- | 12.0     | 5.3  | ----- |
| Cholecystectomy.....                       | 8                  | 0.0                 | 1.3  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.1  | ----- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 1.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CARSON CITY HOSPITAL

Medicare Provider Number: 230208

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.4 years |
| Proportion female.....        | 55.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 56.9 % |
| Transferred from skilled nursing facility..... | 0.2 %  |
| Admitted for elective procedure.....           | 10.7 % |
| Admitted for emergency.....                    | 0.2 %  |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.9 %  |
| Chronic cardiovascular disease..... | 26.7 % |
| Chronic liver disease.....          | 0.2 %  |
| Chronic renal disease.....          | 2.9 %  |
| Chronic pulmonary disease.....      | 10.9 % |
| Cerebrovascular degeneration.....   | 2.7 %  |
| Diabetes mellitus.....              | 7.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 35.9%  |
| State .....         | 62.5%  |
| Outside State ..... | 1.6%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.7 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 85                  |
| Occupancy Rate .....       | 50.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 26.9 %              |
| Case Mix Index (CMI) ..... | 1.1093              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 36     |
| Percent of Physicians Board<br>Certified Specialists ..... | 44.4 % |
| Medical Residents/Interns .....                            | 3      |
| Registered Nurses .....                                    | 61     |
| Licensed Practical Nurses .....                            | 37     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation .....      | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# CENTRAL MICHIGAN COMMUNITY HOSPITAL

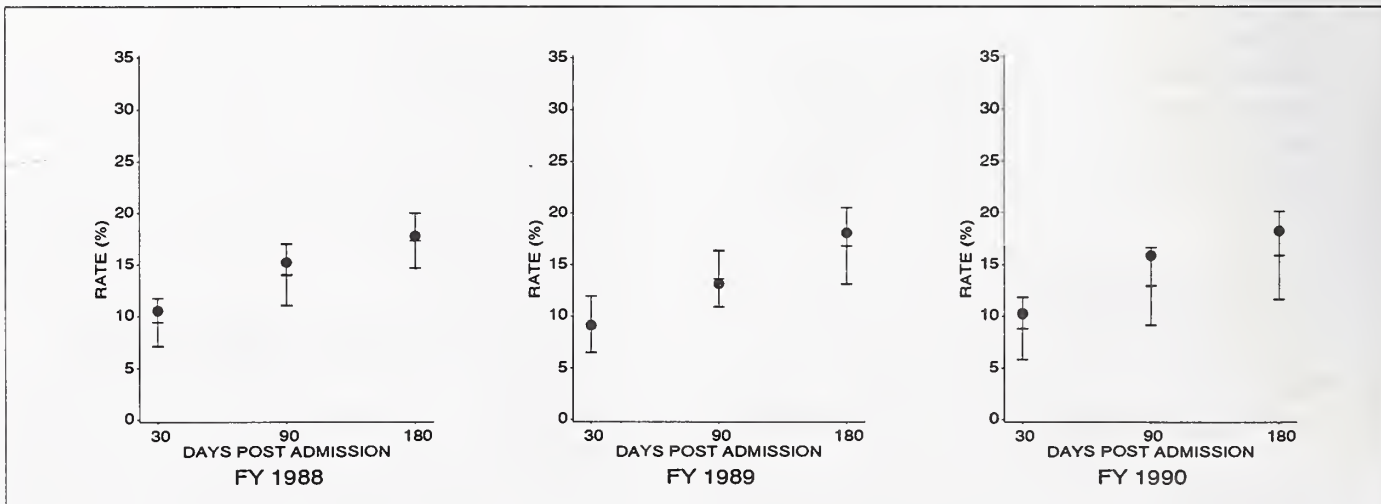
1221 SOUTH DRIVE  
MT PLEASANT, MI 48858  
Medicare Provider Number: 230080

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 738                | 10.2                | 8.8  | 1.5  | 15.9    | 12.9 | 1.9  | 18.3     | 15.9 | 2.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 23                 | 43.5                | 23.6 | ---- | 47.8    | 26.1 | ---- | 52.2     | 28.7 | ---- |
| Congestive Heart Failure.....              | 35                 | 17.1                | 13.4 | ---- | 31.4    | 21.3 | ---- | 34.3     | 27.2 | ---- |
| Pneumonia/Influenza.....                   | 52                 | 7.7                 | 15.4 | 7.2  | 13.5    | 20.8 | 6.9  | 17.3     | 24.2 | 7.1  |
| Chronic Obstructive Pulmonary Disease..... | 9                  | 11.1                | 6.5  | ---- | 33.3    | 10.8 | ---- | 33.3     | 14.8 | ---- |
| Transient Cerebral Ischemia.....           | 8                  | 0.0                 | 2.3  | ---- | 0.0     | 5.5  | ---- | 12.5     | 9.1  | ---- |
| Stroke.....                                | 38                 | 13.2                | 19.1 | ---- | 15.8    | 25.9 | ---- | 26.3     | 29.7 | ---- |
| Hip Fracture.....                          | 35                 | 8.6                 | 7.3  | ---- | 20.0    | 12.7 | ---- | 20.0     | 16.4 | ---- |
| Sepsis.....                                | 5                  | 60.0                | 23.6 | ---- | 80.0    | 32.3 | ---- | 80.0     | 38.4 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1                  | 0.0                 | 3.0  | ---- | 0.0     | 6.9  | ---- | 0.0      | 10.9 | ---- |
| Carotid Endarterectomy.....                | 7                  | 14.3                | 1.6  | ---- | 14.3    | 2.8  | ---- | 14.3     | 4.0  | ---- |
| Hip Replacement/Reconstruction.....        | 27                 | 11.1                | 3.4  | ---- | 11.1    | 6.0  | ---- | 11.1     | 8.0  | ---- |
| Open Reduction of Hip Fracture.....        | 21                 | 4.8                 | 7.1  | ---- | 23.8    | 12.9 | ---- | 23.8     | 16.8 | ---- |
| Prostatectomy.....                         | 57                 | 1.8                 | 1.0  | 1.5  | 3.5     | 2.1  | 2.5  | 3.5      | 3.5  | 4.4  |
| Cholecystectomy.....                       | 15                 | 0.0                 | 2.1  | ---- | 0.0     | 4.2  | ---- | 0.0      | 5.8  | ---- |
| Hysterectomy.....                          | 4                  | 0.0                 | 1.0  | ---- | 0.0     | 2.0  | ---- | 0.0      | 3.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CENTRAL MICHIGAN COMMUNITY HOSPITAL

Medicare Provider Number: 230080

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.8 years

Proportion female..... 54.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 46.9 %

Transferred from skilled nursing facility..... 0.3 %

Admitted for elective procedure..... 26.4 %

Admitted for emergency..... 52.4 %

### COMORBIDITIES:

Cancer..... 6.1 %

Chronic cardiovascular disease..... 40.4 %

Chronic liver disease..... 1.1 %

Chronic renal disease..... 1.8 %

Chronic pulmonary disease..... 13.4 %

Cerebrovascular degeneration..... 1.9 %

Diabetes mellitus..... 7.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 61.1%

State ..... 36.4%

Outside State ..... 2.5%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 118

Occupancy Rate ..... 47.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 31.2 %

Case Mix Index (CMI) ..... 1.2546

### STAFFING:

Total Number of Physicians..... 42

Percent of Physicians Board  
Certified Specialists ..... 59.5 %

Medical Residents/Interns ..... 0

Registered Nurses..... 111

Licensed Practical Nurses ..... 19

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# CHARLEVOIX AREA HOSPITAL

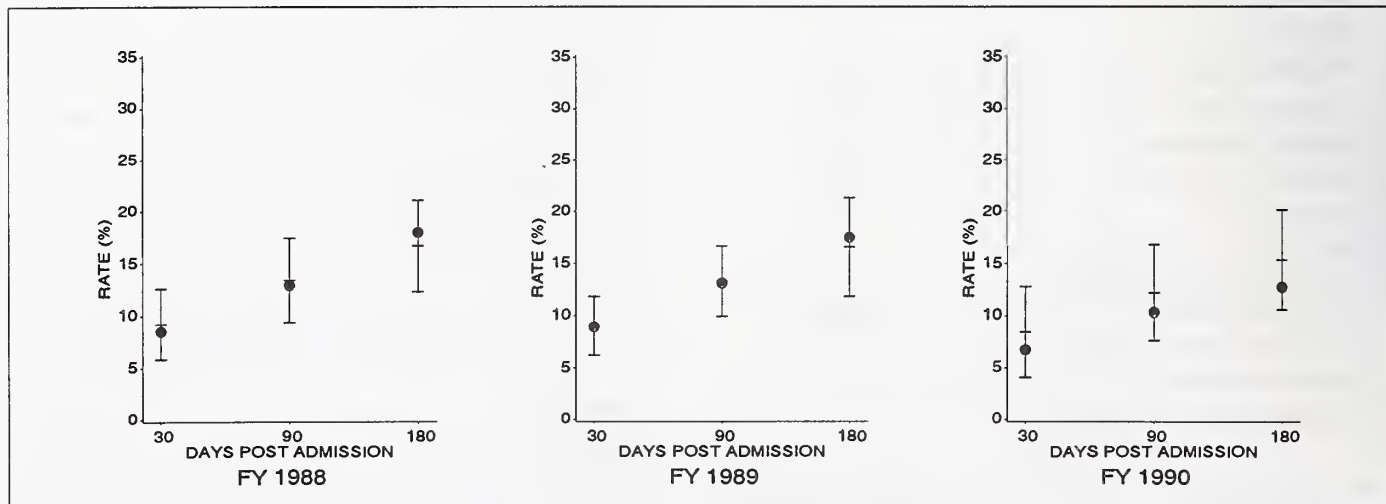
LAKE SHORE DRIVE  
CHARLEVOIX, MI 49720  
Medicare Provider Number: 230124

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 416                | 6.7                 | 8.4  | 2.2  | 10.3    | 12.2 | 2.3  | 12.7     | 15.3 | 2.4  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 17                 | 11.8                | 30.1 | ---- | 17.6    | 32.8 | ---- | 17.6     | 35.6 | ---- |
| Congestive Heart Failure.....              | 18                 | 16.7                | 15.6 | ---- | 27.8    | 23.3 | ---- | 27.8     | 29.2 | ---- |
| Pneumonia/Influenza.....                   | 32                 | 9.4                 | 12.3 | ---- | 12.5    | 17.1 | ---- | 18.8     | 20.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 6                  | 0.0                 | 7.1  | ---- | 0.0     | 12.1 | ---- | 16.7     | 16.4 | ---- |
| Transient Cerebral Ischemia.....           | 8                  | 0.0                 | 1.0  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.9  | ---- |
| Stroke.....                                | 14                 | 50.0                | 21.5 | ---- | 57.1    | 29.7 | ---- | 57.1     | 34.6 | ---- |
| Hip Fracture.....                          | 10                 | 0.0                 | 5.6  | ---- | 10.0    | 10.0 | ---- | 10.0     | 13.0 | ---- |
| Sepsis.....                                | 2                  | 0.0                 | 17.4 | ---- | 0.0     | 28.7 | ---- | 0.0      | 36.8 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 3                  | 0.0                 | 4.4  | ---- | 0.0     | 8.5  | ---- | 0.0      | 11.2 | ---- |
| Open Reduction of Hip Fracture.....        | 7                  | 0.0                 | 5.0  | ---- | 14.3    | 9.3  | ---- | 14.3     | 12.4 | ---- |
| Prostatectomy.....                         | 6                  | 0.0                 | 1.1  | ---- | 0.0     | 2.7  | ---- | 0.0      | 4.8  | ---- |
| Cholecystectomy.....                       | 11                 | 0.0                 | 1.1  | ---- | 0.0     | 2.0  | ---- | 0.0      | 2.7  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CHARLEVOIX AREA HOSPITAL

Medicare Provider Number: 230124

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.2 years  
Proportion female..... 57.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.2 %  
Transferred from skilled nursing facility..... 0.5 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 4.6 %  
Chronic cardiovascular disease..... 35.8 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 1.4 %  
Chronic pulmonary disease..... 13.9 %  
Cerebrovascular degeneration..... 1.4 %  
Diabetes mellitus..... 6.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 74.8%  
State ..... 20.5%  
Outside State ..... 4.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 40  
Occupancy Rate ..... 42.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 44.8 %  
Case Mix Index (CMI) ..... 1.0594

### STAFFING:

Total Number of Physicians..... 20  
Percent of Physicians Board  
Certified Specialists..... 80.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 31  
Licensed Practical Nurses ..... 7

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# CHELSEA COMMUNITY HOSPITAL

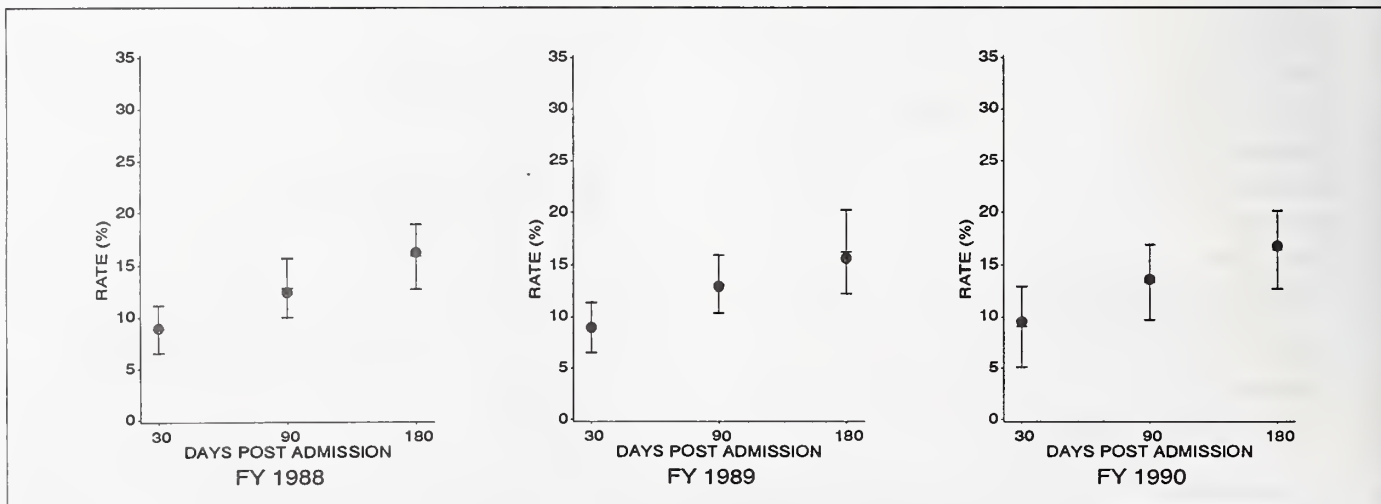
775 S MAIN ST  
CHELSEA, MI 48118  
Medicare Provider Number: 230259

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 631             | 9.5                 | 9.0  | 2.0  | 13.6    | 13.3 | 1.8  | 16.8     | 16.4 | 1.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 28              | 32.1                | 30.4 | ---- | 32.1    | 32.8 | ---- | 35.7     | 35.1 | ---- |
| Congestive Heart Failure.....              | 35              | 17.1                | 14.3 | ---- | 20.0    | 22.5 | ---- | 22.9     | 28.5 | ---- |
| Pneumonia/Influenza.....                   | 29              | 10.3                | 17.4 | ---- | 17.2    | 23.8 | ---- | 20.7     | 28.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 8.0  | ---- | 0.0     | 13.8 | ---- | 0.0      | 18.1 | ---- |
| Transient Cerebral Ischemia.....           | 7               | 0.0                 | 1.0  | ---- | 0.0     | 2.4  | ---- | 0.0      | 4.3  | ---- |
| Stroke.....                                | 30              | 33.3                | 19.5 | ---- | 46.7    | 27.2 | ---- | 53.3     | 31.3 | ---- |
| Hip Fracture.....                          | 2               | 0.0                 | 6.1  | ---- | 50.0    | 11.8 | ---- | 50.0     | 15.8 | ---- |
| Sepsis.....                                | 11              | 36.4                | 30.3 | ---- | 36.4    | 37.7 | ---- | 36.4     | 41.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 34              | 0.0                 | 0.7  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.6  | ---- |
| Cholecystectomy.....                       | 12              | 0.0                 | 2.3  | ---- | 0.0     | 4.4  | ---- | 0.0      | 5.8  | ---- |
| Hysterectomy.....                          | 13              | 0.0                 | 0.6  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CHELSEA COMMUNITY HOSPITAL

Medicare Provider Number: 230259

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years  
Proportion female..... 55.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 50.4 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 31.2 %  
Admitted for emergency..... 52.9 %

### COMORBIDITIES:

Cancer..... 5.2 %  
Chronic cardiovascular disease..... 38.8 %  
Chronic liver disease..... 3.2 %  
Chronic renal disease..... 2.1 %  
Chronic pulmonary disease..... 13.5 %  
Cerebrovascular degeneration..... 6.7 %  
Diabetes mellitus..... 6.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 46.1%  
State ..... 48.8%  
Outside State ..... 5.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 105  
Occupancy Rate ..... 63.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 34.9 %  
Case Mix Index (CMI) ..... 1.0750

### STAFFING:

Total Number of Physicians..... 100  
Percent of Physicians Board  
Certified Specialists ..... 98.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 118  
Licensed Practical Nurses ..... 8

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# CHIPPEWA COUNTY WAR MEMORIAL HOSPITAL

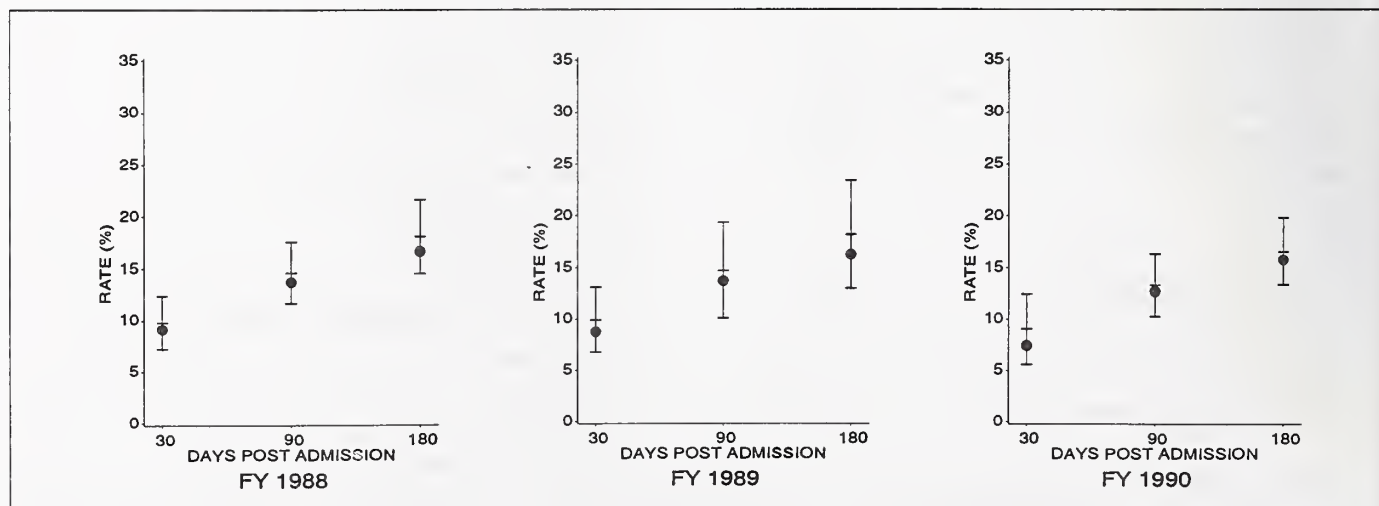
500 OSBORN BLVD  
SAULT STE MARIE, MI 49783  
Medicare Provider Number: 230239

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 678                | 7.4                 | 9.0  | 1.7  | 12.7    | 13.3 | 1.5  | 15.8     | 16.6 | 1.6  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 31                 | 35.5                | 27.7 | ---- | 35.5    | 30.2 | ---- | 38.7     | 32.9 | ---- |
| Congestive Heart Failure.....              | 36                 | 8.3                 | 14.7 | ---- | 13.9    | 23.7 | ---- | 19.4     | 30.0 | ---- |
| Pneumonia/Influenza.....                   | 59                 | 8.5                 | 14.0 | 6.5  | 16.9    | 19.5 | 9.6  | 16.9     | 23.3 | 7.5  |
| Chronic Obstructive Pulmonary Disease..... | 14                 | 14.3                | 6.1  | ---- | 14.3    | 11.2 | ---- | 21.4     | 15.5 | ---- |
| Transient Cerebral Ischemia.....           | 11                 | 0.0                 | 1.3  | ---- | 0.0     | 3.1  | ---- | 0.0      | 5.4  | ---- |
| Stroke.....                                | 39                 | 15.4                | 15.4 | ---- | 23.1    | 21.6 | ---- | 25.6     | 25.4 | ---- |
| Hip Fracture.....                          | 17                 | 5.9                 | 5.9  | ---- | 17.6    | 10.3 | ---- | 23.5     | 13.3 | ---- |
| Sepsis.....                                | 17                 | 23.5                | 23.9 | ---- | 29.4    | 30.3 | ---- | 35.3     | 34.7 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 18                 | 0.0                 | 2.4  | ---- | 5.6     | 4.3  | ---- | 11.1     | 6.1  | ---- |
| Open Reduction of Hip Fracture.....        | 9                  | 0.0                 | 6.2  | ---- | 11.1    | 11.0 | ---- | 11.1     | 14.0 | ---- |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 13                 | 7.7                 | 4.2  | ---- | 7.7     | 6.7  | ---- | 7.7      | 8.2  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 2.9  | ---- | 0.0     | 6.6  | ---- | 50.0     | 9.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CHIPPEWA COUNTY WAR MEMORIAL HOSPITAL

Medicare Provider Number: 230239

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.4 years |
| Proportion female.....        | 57.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 97.2 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 0.1 %  |
| Admitted for emergency.....                    | 16.5 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.6 %  |
| Chronic cardiovascular disease..... | 48.1 % |
| Chronic liver disease.....          | 1.5 %  |
| Chronic renal disease.....          | 0.6 %  |
| Chronic pulmonary disease.....      | 14.7 % |
| Cerebrovascular degeneration.....   | 3.8 %  |
| Diabetes mellitus.....              | 9.9 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 84.3%  |
| State .....         | 12.5%  |
| Outside State ..... | 3.2%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 5.8 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 137                 |
| Occupancy Rate .....       | 57.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 36.9 %              |
| Case Mix Index (CMI) ..... | 1.1587              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 24     |
| Percent of Physicians Board<br>Certified Specialists..... | 62.5 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 73     |
| Licensed Practical Nurses.....                            | 11     |

### SPECIALTY SERVICES:

|                                      |     |
|--------------------------------------|-----|
| Burn Unit .....                      | No  |
| Cardiac Intensive Care .....         | No  |
| Comprehensive Geriatric .....        | No  |
| Hospice Care .....                   | No  |
| Medical/Surgical Intensive Care..... | Yes |
| Organ/Tissue Transplant .....        | No  |
| Other Intensive Care .....           | No  |
| Trauma Center .....                  | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug.....         | No  |
| Rehabilitation.....       | No  |
| Psychiatric.....          | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# CLINTON MEMORIAL HOSPITAL

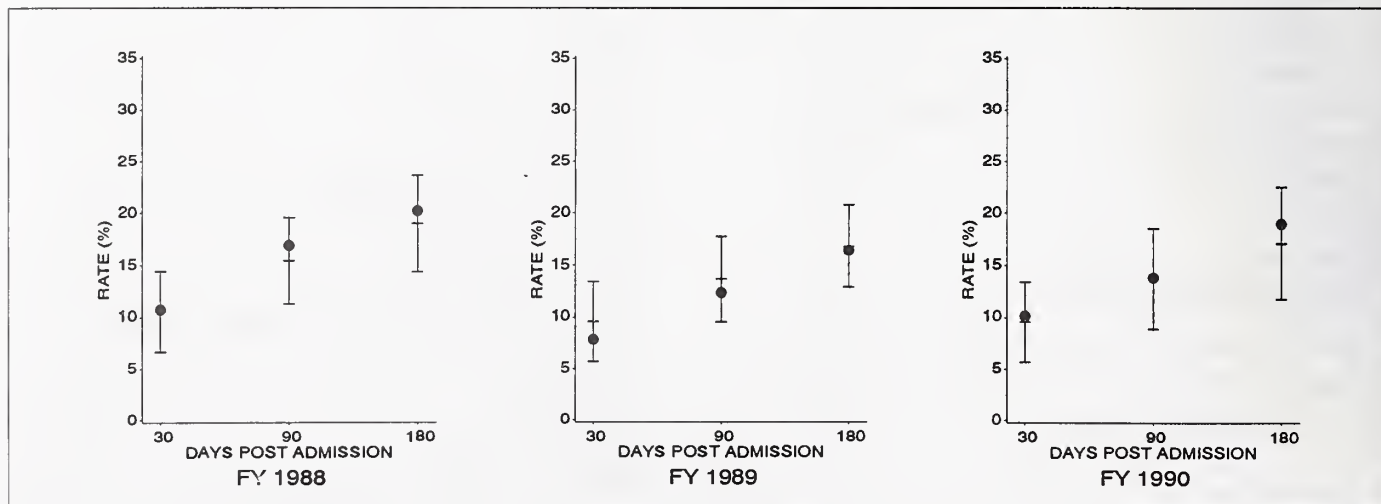
805 S OAKLAND  
ST JOHNS, MI 48879  
Medicare Provider Number: 230103

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 326             | 10.1                | 9.5  | 1.9  | 13.8    | 13.7 | 2.4  | 19.0     | 17.1 | 2.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 20              | 30.0                | 30.6 | ---- | 35.0    | 33.2 | ---- | 35.0     | 36.1 | ---- |
| Congestive Heart Failure.....              | 25              | 12.0                | 14.0 | ---- | 20.0    | 22.2 | ---- | 32.0     | 28.6 | ---- |
| Pneumonia/Influenza.....                   | 26              | 23.1                | 16.2 | ---- | 26.9    | 21.9 | ---- | 30.8     | 25.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 20.0                | 7.6  | ---- | 20.0    | 14.2 | ---- | 40.0     | 18.7 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 4.1  | ---- | 0.0     | 9.8  | ---- | 0.0      | 16.2 | ---- |
| Stroke.....                                | 13              | 15.4                | 20.1 | ---- | 15.4    | 25.6 | ---- | 23.1     | 29.2 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 4               | 0.0                 | 11.2 | ---- | 0.0     | 15.3 | ---- | 0.0      | 19.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 11              | 0.0                 | 0.7  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.5  | ---- |
| Cholecystectomy.....                       | 7               | 0.0                 | 1.2  | ---- | 0.0     | 2.0  | ---- | 0.0      | 2.6  | ---- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.6  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CLINTON MEMORIAL HOSPITAL

Medicare Provider Number: 230103

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.2 years |
| Proportion female.....        | 59.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 28.8 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 8.3 %  |
| Admitted for emergency.....                    | 4.6 %  |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.1 %  |
| Chronic cardiovascular disease..... | 39.0 % |
| Chronic liver disease.....          | 1.5 %  |
| Chronic renal disease.....          | 2.1 %  |
| Chronic pulmonary disease.....      | 12.3 % |
| Cerebrovascular degeneration.....   | 2.8 %  |
| Diabetes mellitus.....              | 11.7 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 79.6%  |
| State .....         | 19.1%  |
| Outside State ..... | 1.3%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 5.8 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 48                  |
| Occupancy Rate .....       | 33.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 36.1 %              |
| Case Mix Index (CMI) ..... | 1.0141              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 75     |
| Percent of Physicians Board<br>Certified Specialists ..... | 62.7 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 35     |
| Licensed Practical Nurses .....                            | 12     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# COMMUNITY HEALTH CENTER

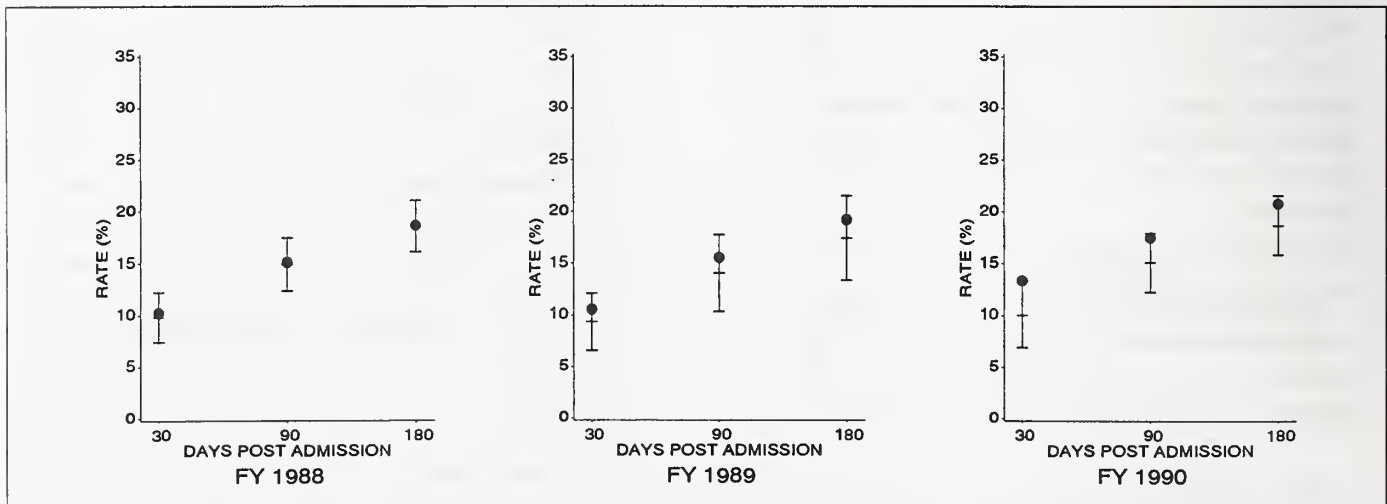
274 E CHICAGO ST  
COLDWATER, MI 49036  
Medicare Provider Number: 230022

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 981             | 13.3                | 10.0 | 1.6   | 17.5    | 15.1 | 1.4   | 20.8     | 18.7 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 32              | 37.5                | 23.8 | ----- | 37.5    | 27.3 | ----- | 43.8     | 30.3 | ----- |
| Congestive Heart Failure.....              | 56              | 19.6                | 14.8 | 5.9   | 23.2    | 23.3 | 6.0   | 28.6     | 29.6 | 6.1   |
| Pneumonia/Influenza.....                   | 63              | 9.5                 | 15.8 | 7.8   | 19.0    | 22.0 | 7.2   | 22.2     | 25.8 | 7.1   |
| Chronic Obstructive Pulmonary Disease..... | 16              | 12.5                | 8.8  | ----- | 12.5    | 15.3 | ----- | 18.8     | 19.9 | ----- |
| Transient Cerebral Ischemia.....           | 11              | 18.2                | 1.9  | ----- | 18.2    | 4.4  | ----- | 18.2     | 7.2  | ----- |
| Stroke.....                                | 25              | 40.0                | 22.5 | ----- | 44.0    | 30.9 | ----- | 48.0     | 35.1 | ----- |
| Hip Fracture.....                          | 54              | 5.6                 | 6.1  | 3.3   | 7.4     | 10.8 | 5.2   | 9.3      | 14.1 | 6.1   |
| Sepsis.....                                | 18              | 16.7                | 22.5 | ----- | 27.8    | 28.6 | ----- | 38.9     | 32.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 3.9  | ----- | 0.0     | 7.5  | ----- | 0.0      | 10.4 | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 2.7  | ----- | 0.0     | 4.8  | ----- | 0.0      | 6.6  | ----- |
| Hip Replacement/Reconstruction.....        | 44              | 0.0                 | 3.6  | ----- | 2.3     | 7.0  | ----- | 4.5      | 9.6  | ----- |
| Open Reduction of Hip Fracture.....        | 8               | 0.0                 | 6.4  | ----- | 12.5    | 11.6 | ----- | 12.5     | 15.6 | ----- |
| Prostatectomy.....                         | 30              | 0.0                 | 1.0  | ----- | 0.0     | 2.3  | ----- | 6.7      | 4.0  | ----- |
| Cholecystectomy.....                       | 32              | 6.3                 | 2.8  | ----- | 6.3     | 4.1  | ----- | 6.3      | 5.0  | ----- |
| Hysterectomy.....                          | 7               | 0.0                 | 0.5  | ----- | 0.0     | 1.3  | ----- | 0.0      | 2.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# COMMUNITY HEALTH CENTER

Medicare Provider Number: 230022

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.0 years

Proportion female..... 58.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.7 %

Transferred from skilled nursing facility..... 0.2 %

Admitted for elective procedure..... 20.7 %

Admitted for emergency..... 60.1 %

### COMORBIDITIES:

Cancer..... 7.9 %

Chronic cardiovascular disease..... 33.4 %

Chronic liver disease..... 1.5 %

Chronic renal disease..... 2.1 %

Chronic pulmonary disease..... 14.1 %

Cerebrovascular degeneration..... 5.5 %

Diabetes mellitus..... 5.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 69.5%

State ..... 26.7%

Outside State ..... 3.8%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 130

Occupancy Rate ..... 49.0 %

Ownership/Control..... Local Government

Medicare Discharges ..... 35.5 %

Case Mix Index (CMI) ..... 1.2428

### STAFFING:

Total Number of Physicians..... 38

Percent of Physicians Board  
Certified Specialists..... 55.3 %

Medical Residents/Interns ..... 0

Registered Nurses..... 110

Licensed Practical Nurses ..... 48

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... Yes

Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# COMMUNITY HOSPITAL

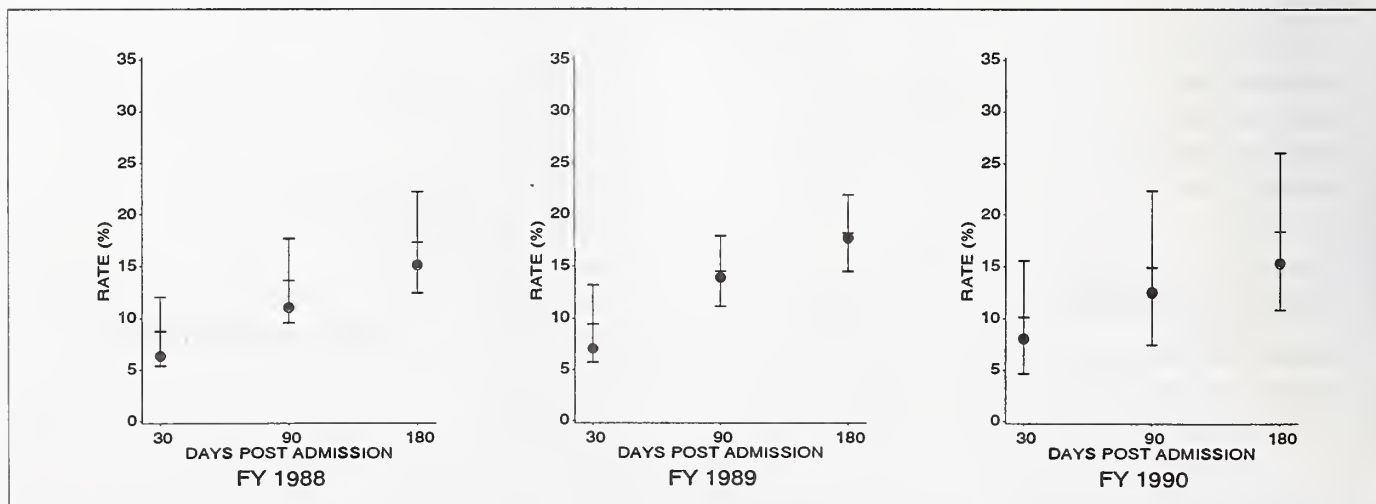
MEDICAL PARK DR  
WATERVLIET, MI 49098  
Medicare Provider Number: 230078

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 399                | 8.0                 | 10.1 | 2.7  | 12.5    | 14.9 | 3.7  | 15.3     | 18.4 | 3.8  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 15                 | 20.0                | 24.5 | ---- | 20.0    | 27.7 | ---- | 20.0     | 30.4 | ---- |
| Congestive Heart Failure.....              | 36                 | 19.4                | 13.9 | ---- | 30.6    | 22.1 | ---- | 30.6     | 27.6 | ---- |
| Pneumonia/Influenza.....                   | 16                 | 18.8                | 13.0 | ---- | 18.8    | 18.4 | ---- | 18.8     | 21.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7                  | 0.0                 | 11.9 | ---- | 0.0     | 20.0 | ---- | 0.0      | 25.2 | ---- |
| Transient Cerebral Ischemia.....           | 8                  | 0.0                 | 2.1  | ---- | 0.0     | 4.6  | ---- | 0.0      | 7.3  | ---- |
| Stroke.....                                | 18                 | 5.6                 | 17.7 | ---- | 16.7    | 23.1 | ---- | 16.7     | 26.9 | ---- |
| Hip Fracture.....                          | 6                  | 16.7                | 7.2  | ---- | 16.7    | 13.1 | ---- | 16.7     | 17.4 | ---- |
| Sepsis.....                                | 8                  | 25.0                | 21.1 | ---- | 37.5    | 27.6 | ---- | 37.5     | 31.9 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1                  | 0.0                 | 4.4  | ---- | 0.0     | 9.9  | ---- | 0.0      | 15.7 | ---- |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 1                  | 100.0               | 2.9  | ---- | 100.0   | 5.6  | ---- | 100.0    | 7.5  | ---- |
| Open Reduction of Hip Fracture.....        | 4                  | 0.0                 | 7.1  | ---- | 0.0     | 12.9 | ---- | 0.0      | 17.3 | ---- |
| Prostatectomy.....                         | 6                  | 0.0                 | 0.7  | ---- | 0.0     | 1.8  | ---- | 0.0      | 3.3  | ---- |
| Cholecystectomy.....                       | 10                 | 0.0                 | 0.9  | ---- | 0.0     | 1.7  | ---- | 0.0      | 2.3  | ---- |
| Hysterectomy.....                          | 1                  | 0.0                 | 1.3  | ---- | 0.0     | 3.2  | ---- | 0.0      | 5.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# COMMUNITY HOSPITAL

Medicare Provider Number: 230078

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.7 years |
| Proportion female.....        | 57.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 36.3 % |
| Transferred from skilled nursing facility..... | 0.3 %  |
| Admitted for elective procedure.....           | 9.8 %  |
| Admitted for emergency.....                    | 38.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 3.0 %  |
| Chronic cardiovascular disease..... | 36.6 % |
| Chronic liver disease.....          | 1.0 %  |
| Chronic renal disease.....          | 2.0 %  |
| Chronic pulmonary disease.....      | 15.5 % |
| Cerebrovascular degeneration.....   | 1.0 %  |
| Diabetes mellitus.....              | 8.8 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 52.5%  |
| State .....         | 45.2%  |
| Outside State ..... | 2.3%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.8 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 70                  |
| Occupancy Rate .....       | 37.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 35.7 %              |
| Case Mix Index (CMI) ..... | 1.1951              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 25     |
| Percent of Physicians Board<br>Certified Specialists ..... | 12.0 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 43     |
| Licensed Practical Nurses.....                             | 10     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | No  |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | Yes |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# COMMUNITY MEMORIAL HOSPITAL

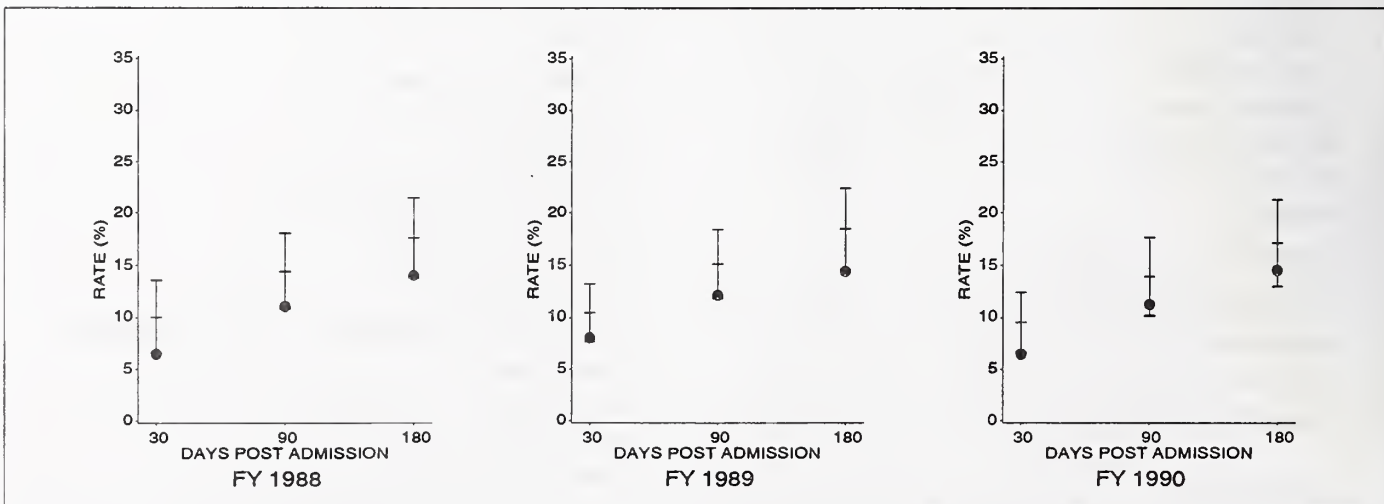
748 S MAIN  
CHEBOYGAN, MI 49721  
Medicare Provider Number: 230034

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 753                | 6.4                 | 9.5  | 1.5   | 11.2    | 13.9 | 1.9   | 14.5     | 17.1 | 2.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 29                 | 20.7                | 28.3 | ----- | 24.1    | 31.0 | ----- | 27.6     | 33.4 | ----- |
| Congestive Heart Failure.....              | 39                 | 0.0                 | 15.4 | ----- | 10.3    | 23.6 | ----- | 15.4     | 29.6 | ----- |
| Pneumonia/Influenza.....                   | 44                 | 9.1                 | 14.6 | ----- | 11.4    | 20.2 | ----- | 13.6     | 24.2 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 25                 | 12.0                | 12.0 | ----- | 32.0    | 20.1 | ----- | 40.0     | 25.7 | ----- |
| Transient Cerebral Ischemia.....           | 8                  | 0.0                 | 3.2  | ----- | 12.5    | 6.9  | ----- | 12.5     | 10.6 | ----- |
| Stroke.....                                | 27                 | 7.4                 | 23.1 | ----- | 14.8    | 29.6 | ----- | 18.5     | 33.4 | ----- |
| Hip Fracture.....                          | 25                 | 16.0                | 8.5  | ----- | 20.0    | 14.6 | ----- | 24.0     | 18.8 | ----- |
| Sepsis.....                                | 12                 | 25.0                | 26.2 | ----- | 33.3    | 31.2 | ----- | 41.7     | 35.3 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 10                 | 10.0                | 6.7  | ----- | 10.0    | 11.2 | ----- | 20.0     | 14.8 | ----- |
| Open Reduction of Hip Fracture.....        | 11                 | 18.2                | 8.0  | ----- | 27.3    | 14.7 | ----- | 27.3     | 19.4 | ----- |
| Prostatectomy.....                         | 57                 | 0.0                 | 0.8  | 1.7   | 0.0     | 1.9  | 3.2   | 0.0      | 3.2  | 5.0   |
| Cholecystectomy.....                       | 19                 | 0.0                 | 1.8  | ----- | 0.0     | 3.1  | ----- | 0.0      | 4.0  | ----- |
| Hysterectomy.....                          | 4                  | 0.0                 | 1.2  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# COMMUNITY MEMORIAL HOSPITAL

Medicare Provider Number: 230034

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.6 years |
| Proportion female.....        | 52.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 42.1 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 21.0 % |
| Admitted for emergency.....                    | 78.1 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.1 %  |
| Chronic cardiovascular disease..... | 40.2 % |
| Chronic liver disease.....          | 1.1 %  |
| Chronic renal disease.....          | 0.7 %  |
| Chronic pulmonary disease.....      | 20.8 % |
| Cerebrovascular degeneration.....   | 1.9 %  |
| Diabetes mellitus.....              | 6.2 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 63.3%  |
| State .....         | 33.6%  |
| Outside State ..... | 3.1%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 5.4 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 129                 |
| Occupancy Rate .....       | 62.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 42.4 %              |
| Case Mix Index (CMI) ..... | 1.1668              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 33     |
| Percent of Physicians Board<br>Certified Specialists ..... | 57.6 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 46     |
| Licensed Practical Nurses.....                             | 8      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | No  |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric.....          | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

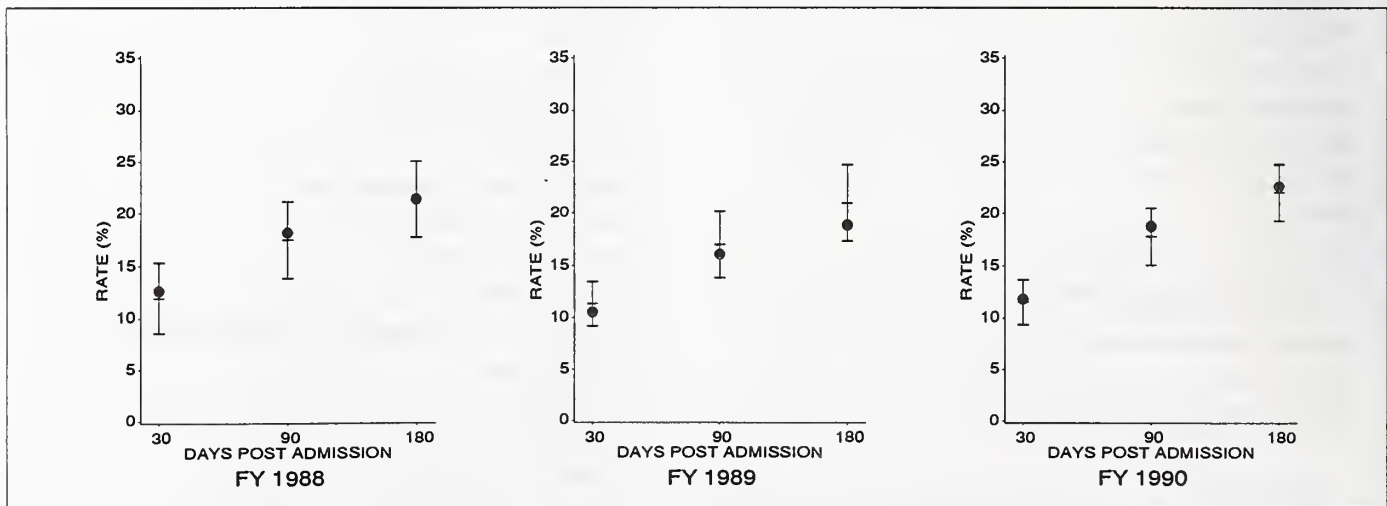
**COTTAGE HOSPITAL**  
 159 KERCHEVAL AVENUE  
 GROSSE POINTE, MI 48236  
 Medicare Provider Number: 230135

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1210               | 11.8                | 11.5 | 1.1   | 18.8    | 17.8 | 1.4   | 22.6     | 22.0 | 1.4   |
| <b>CONDITIONS:</b>                         |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 39                 | 30.8                | 26.1 | ----- | 35.9    | 29.3 | ----- | 35.9     | 31.8 | ----- |
| Congestive Heart Failure.....              | 91                 | 13.2                | 16.9 | 6.6   | 22.0    | 26.7 | 7.7   | 28.6     | 33.5 | 8.7   |
| Pneumonia/Influenza.....                   | 52                 | 11.5                | 16.7 | 9.6   | 19.2    | 23.5 | 8.8   | 25.0     | 27.6 | 8.2   |
| Chronic Obstructive Pulmonary Disease..... | 17                 | 17.6                | 13.9 | ----- | 23.5    | 21.8 | ----- | 35.3     | 26.9 | ----- |
| Transient Cerebral Ischemia.....           | 16                 | 6.3                 | 1.9  | ----- | 6.3     | 4.1  | ----- | 6.3      | 6.3  | ----- |
| Stroke.....                                | 59                 | 20.3                | 21.5 | 5.4   | 33.9    | 28.9 | 7.0   | 39.0     | 32.8 | 8.0   |
| Hip Fracture.....                          | 32                 | 6.3                 | 8.4  | ----- | 9.4     | 14.9 | ----- | 15.6     | 19.3 | ----- |
| Sepsis.....                                | 11                 | 72.7                | 28.5 | ----- | 72.7    | 39.7 | ----- | 72.7     | 45.0 | ----- |
| <b>PROCEDURES:</b>                         |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 14                 | 0.0                 | 4.7  | ----- | 0.0     | 9.5  | ----- | 0.0      | 13.6 | ----- |
| Carotid Endarterectomy.....                | 7                  | 0.0                 | 3.0  | ----- | 0.0     | 5.6  | ----- | 14.3     | 7.8  | ----- |
| Hip Replacement/Reconstruction.....        | 15                 | 0.0                 | 4.3  | ----- | 0.0     | 8.2  | ----- | 0.0      | 10.9 | ----- |
| Open Reduction of Hip Fracture.....        | 18                 | 5.6                 | 8.5  | ----- | 11.1    | 15.1 | ----- | 16.7     | 19.4 | ----- |
| Prostatectomy.....                         | 49                 | 0.0                 | 1.0  | ----- | 0.0     | 2.2  | ----- | 0.0      | 3.6  | ----- |
| Cholecystectomy.....                       | 16                 | 6.3                 | 4.8  | ----- | 6.3     | 9.3  | ----- | 6.3      | 12.3 | ----- |
| Hysterectomy.....                          | 11                 | 0.0                 | 0.4  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
 FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**COTTAGE HOSPITAL**  
Medicare Provider Number: 230135

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.5 years  
Proportion female..... 59.3 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 34.2 %  
Transferred from skilled nursing facility..... 3.0 %  
Admitted for elective procedure..... 2.3 %  
Admitted for emergency..... 94.4 %

**COMORBIDITIES:**

Cancer..... 10.4 %  
Chronic cardiovascular disease..... 35.4 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 3.5 %  
Chronic pulmonary disease..... 13.7 %  
Cerebrovascular degeneration..... 3.2 %  
Diabetes mellitus..... 6.3 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 52.0%  
State..... 46.4%  
Outside State ..... 1.6%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 171  
Occupancy Rate ..... 55.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 45.5 %  
Case Mix Index (CMI) ..... 1.2207

**STAFFING:**

Total Number of Physicians..... 168  
Percent of Physicians Board  
Certified Specialists..... 92.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 120  
Licensed Practical Nurses ..... 23

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# CRITTENTON HOSPITAL

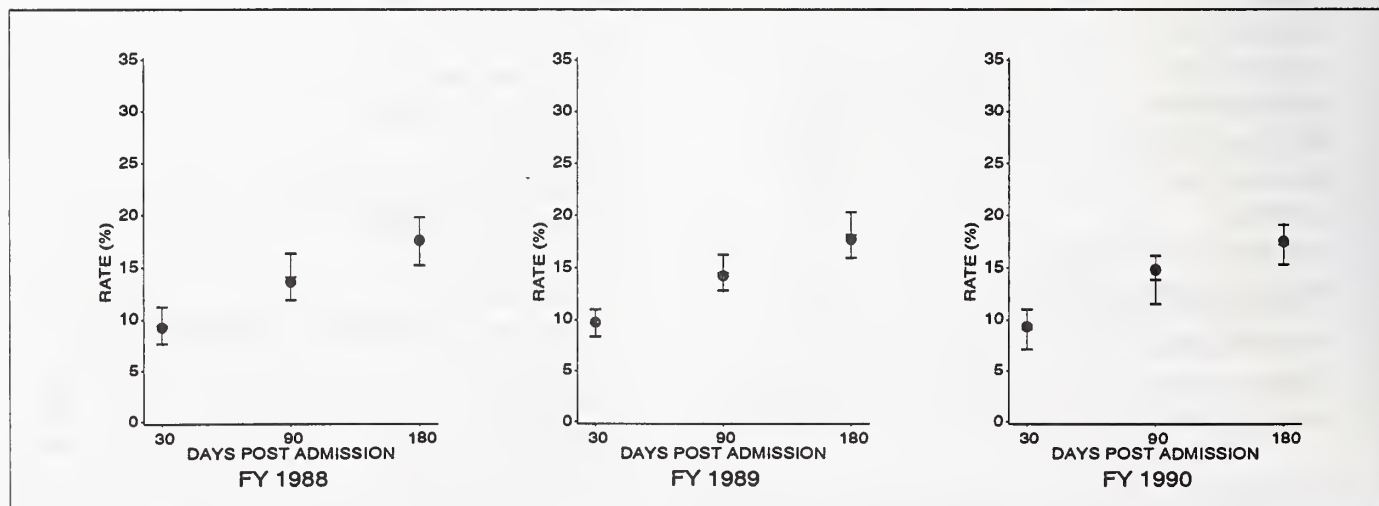
1101 W UNIVERSITY DRIVE  
ROCHESTER, MI 48063  
Medicare Provider Number: 230254

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1921            | 9.3                 | 9.0  | 1.0  | 14.8    | 13.8 | 1.2  | 17.5     | 17.2 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 63              | 28.6                | 22.6 | 7.1  | 36.5    | 25.6 | 8.5  | 39.7     | 28.1 | 8.9  |
| Congestive Heart Failure.....              | 119             | 14.3                | 14.9 | 3.6  | 19.3    | 23.6 | 5.3  | 26.9     | 30.0 | 4.9  |
| Pneumonia/Influenza.....                   | 64              | 14.1                | 15.4 | 5.3  | 28.1    | 20.7 | 6.7  | 29.7     | 24.6 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 23              | 4.3                 | 11.6 | ---- | 8.7     | 20.6 | ---- | 8.7      | 26.7 | ---- |
| Transient Cerebral Ischemia.....           | 55              | 5.5                 | 2.1  | 2.8  | 7.3     | 4.7  | 5.6  | 14.5     | 7.6  | 6.6  |
| Stroke.....                                | 66              | 25.8                | 23.4 | 10.0 | 37.9    | 30.9 | 8.9  | 42.4     | 34.8 | 9.2  |
| Hip Fracture.....                          | 50              | 4.0                 | 6.7  | ---- | 18.0    | 12.2 | ---- | 28.0     | 15.8 | ---- |
| Sepsis.....                                | 17              | 17.6                | 18.0 | ---- | 29.4    | 22.3 | ---- | 29.4     | 25.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 32              | 3.1                 | 4.4  | ---- | 9.4     | 9.2  | ---- | 9.4      | 13.1 | ---- |
| Carotid Endarterectomy.....                | 11              | 9.1                 | 2.0  | ---- | 9.1     | 3.6  | ---- | 9.1      | 5.0  | ---- |
| Hip Replacement/Reconstruction.....        | 34              | 2.9                 | 2.9  | ---- | 5.9     | 5.9  | ---- | 11.8     | 8.1  | ---- |
| Open Reduction of Hip Fracture.....        | 32              | 6.3                 | 7.0  | ---- | 25.0    | 13.0 | ---- | 34.4     | 16.8 | ---- |
| Prostatectomy.....                         | 63              | 0.0                 | 0.7  | 1.3  | 0.0     | 1.4  | 2.4  | 0.0      | 2.4  | 3.8  |
| Cholecystectomy.....                       | 57              | 5.3                 | 2.3  | 4.1  | 7.0     | 4.2  | 4.7  | 7.0      | 5.6  | 5.3  |
| Hysterectomy.....                          | 16              | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# CRITTENTON HOSPITAL

Medicare Provider Number: 230254

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.5 years  
Proportion female..... 59.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 16.8 %  
Admitted for emergency..... 81.7 %

### COMORBIDITIES:

Cancer..... 7.1 %  
Chronic cardiovascular disease..... 44.6 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 14.7 %  
Cerebrovascular degeneration..... 3.1 %  
Diabetes mellitus..... 8.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 67.5%  
State ..... 29.0%  
Outside State ..... 3.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 236  
Occupancy Rate ..... 64.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 27.1 %  
Case Mix Index (CMI) ..... 1.2457

### STAFFING:

Total Number of Physicians..... 183  
Percent of Physicians Board  
Certified Specialists..... 78.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 218  
Licensed Practical Nurses ..... 57

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# CRYSTAL FALLS COMMUNITY HOSPITAL

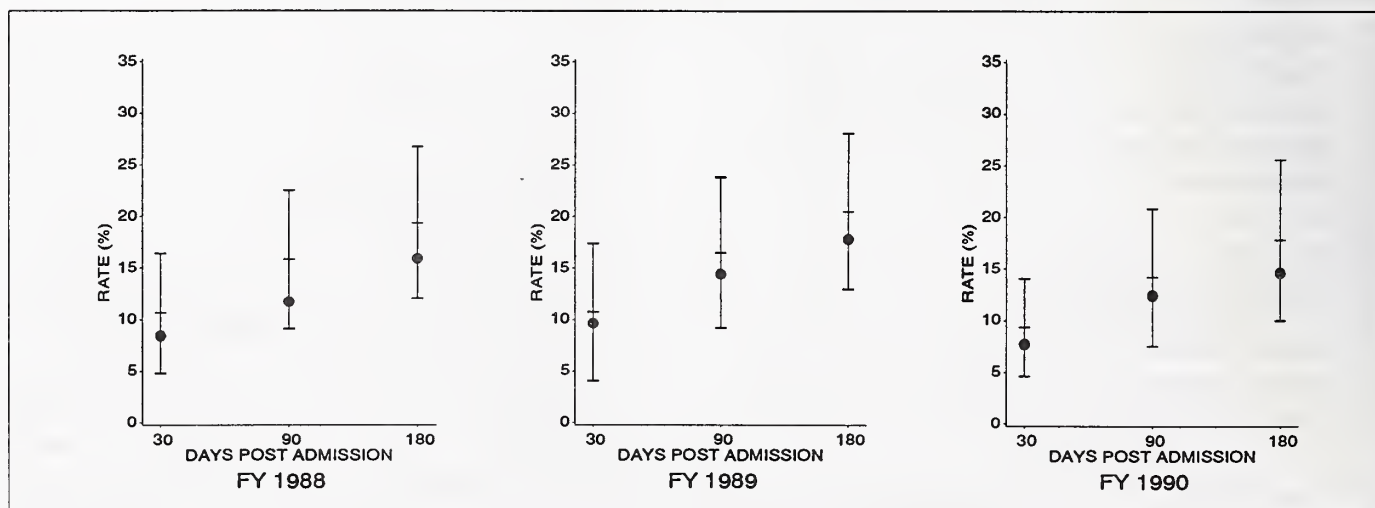
MICHIGAN AND 3RD ST  
CRYSTAL FALLS, MI 49920  
Medicare Provider Number: 230194

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 233             | 7.7                 | 9.3  | 2.4  | 12.4    | 14.2 | 3.3  | 14.6     | 17.8 | 3.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 7               | 28.6                | 28.5 | ---- | 28.6    | 31.8 | ---- | 28.6     | 34.8 | ---- |
| Congestive Heart Failure.....              | 10              | 10.0                | 12.1 | ---- | 20.0    | 19.5 | ---- | 30.0     | 24.9 | ---- |
| Pneumonia/Influenza.....                   | 18              | 5.6                 | 11.4 | ---- | 5.6     | 15.7 | ---- | 11.1     | 19.4 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 4               | 0.0                 | 9.0  | ---- | 0.0     | 14.6 | ---- | 0.0      | 19.7 | ---- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 0.7  | ---- | 0.0     | 1.5  | ---- | 0.0      | 2.4  | ---- |
| Stroke.....                                | 10              | 20.0                | 22.9 | ---- | 20.0    | 28.5 | ---- | 20.0     | 32.1 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 5               | 0.0                 | 18.4 | ---- | 0.0     | 28.2 | ---- | 20.0     | 34.0 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 2.6  | ---- | 0.0     | 5.8  | ---- | 0.0      | 9.3  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 7               | 14.3                | 3.7  | ---- | 14.3    | 7.8  | ---- | 14.3     | 11.7 | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.4  | ---- | 0.0     | 1.1  | ---- | 0.0      | 2.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# CRYSTAL FALLS COMMUNITY HOSPITAL

Medicare Provider Number: 230194

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.7 years

Proportion female..... 63.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 98.3 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.9 %

Admitted for emergency..... 60.9 %

### COMORBIDITIES:

Cancer..... 6.4 %

Chronic cardiovascular disease..... 40.3 %

Chronic liver disease..... 1.7 %

Chronic renal disease..... 2.1 %

Chronic pulmonary disease..... 18.0 %

Cerebrovascular degeneration..... 4.3 %

Diabetes mellitus..... 3.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 82.4%

State..... 10.4%

Outside State..... 7.2%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 6.3 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 35

Occupancy Rate..... 20.0 %

Ownership/Control..... Local Government

Medicare Discharges..... 70.8 %

Case Mix Index (CMI)..... 1.1362

### STAFFING:

Total Number of Physicians..... 5

Percent of Physicians Board  
Certified Specialists..... 40.0 %

Medical Residents/Interns..... 0

Registered Nurses..... 14

Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DECKERVILLE COMMUNITY HOSPITAL

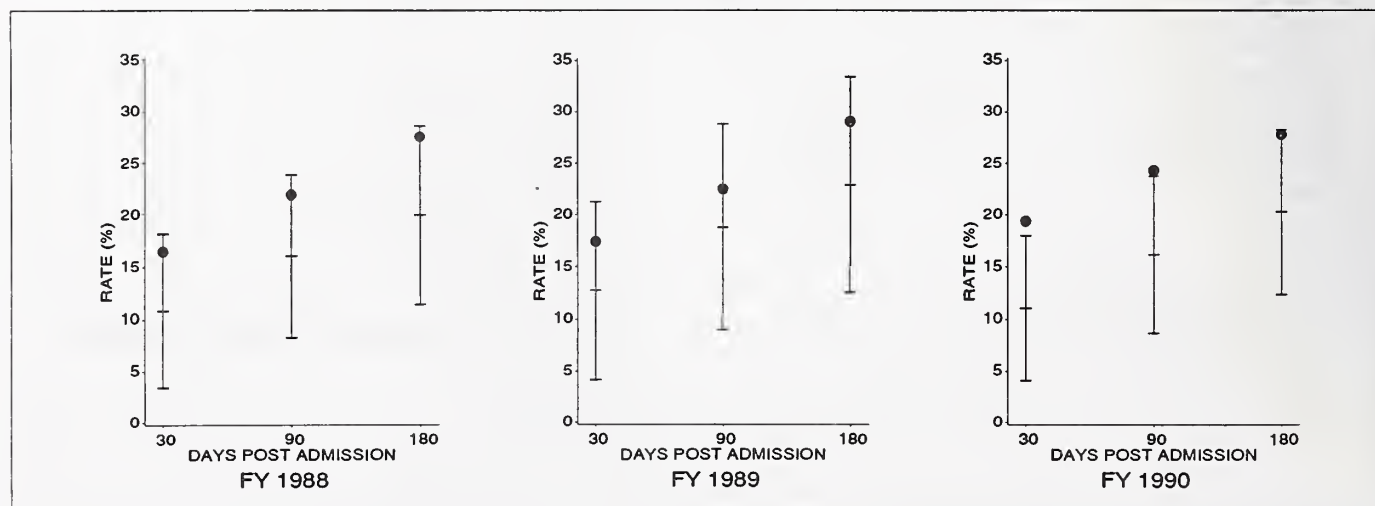
3559 PINE ST  
DECKERVILLE, MI 48427  
Medicare Provider Number: 230154

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 144             | 19.4                | 11.0 | 3.5   | 24.3    | 16.2 | 3.8   | 27.8     | 20.3 | 4.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 9               | 33.3                | 24.8 | ----- | 33.3    | 27.5 | ----- | 33.3     | 29.8 | ----- |
| Congestive Heart Failure.....              | 13              | 30.8                | 12.4 | ----- | 46.2    | 19.7 | ----- | 46.2     | 26.2 | ----- |
| Pneumonia/Influenza.....                   | 23              | 13.0                | 15.9 | ----- | 13.0    | 21.9 | ----- | 17.4     | 25.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 1               | 0.0                 | 1.9  | ----- | 0.0     | 5.0  | ----- | 0.0      | 8.7  | ----- |
| Stroke.....                                | 2               | 0.0                 | 10.6 | ----- | 0.0     | 17.1 | ----- | 0.0      | 21.7 | ----- |
| Hip Fracture.....                          | 1               | 0.0                 | 14.4 | ----- | 0.0     | 24.3 | ----- | 0.0      | 32.1 | ----- |
| Sepsis.....                                | 5               | 80.0                | 23.6 | ----- | 80.0    | 39.0 | ----- | 80.0     | 46.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 4               | 0.0                 | 0.3  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |
| Cholecystectomy.....                       | 3               | 0.0                 | 0.6  | ----- | 0.0     | 0.9  | ----- | 0.0      | 1.3  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# DECKERVILLE COMMUNITY HOSPITAL

Medicare Provider Number: 230154

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 77.5 years |
| Proportion female.....        | 52.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 97.9 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 9.0 %  |
| Admitted for emergency.....                    | 10.4 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 4.9 %  |
| Chronic cardiovascular disease..... | 41.7 % |
| Chronic liver disease.....          | 2.1 %  |
| Chronic renal disease.....          | 4.9 %  |
| Chronic pulmonary disease.....      | 12.5 % |
| Cerebrovascular degeneration.....   | 7.6 %  |
| Diabetes mellitus.....              | 10.4 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 81.7%  |
| State .....         | 18.3%  |
| Outside State ..... | 0.0%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 4.3 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 25                  |
| Occupancy Rate .....       | 20.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 33.3 %              |
| Case Mix Index (CMI) ..... | 1.0856              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 4      |
| Percent of Physicians Board<br>Certified Specialists ..... | 25.0 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 11     |
| Licensed Practical Nurses.....                             | 8      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | No  |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# DETROIT OSTEOPATHIC HOSPITAL

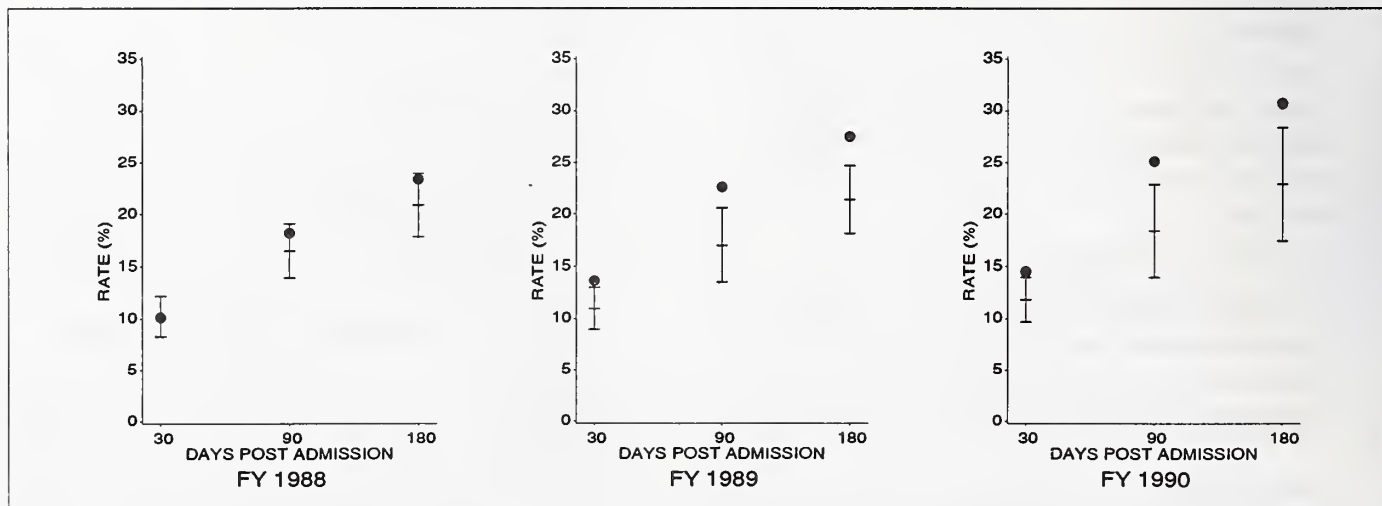
12523 3RD AVE  
HIGHLAND PARK, MI 48203  
Medicare Provider Number: 230150

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1063               | 14.5                | 11.8 | 1.1   | 25.1    | 18.4 | 2.2   | 30.7     | 22.9 | 2.7   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 23                 | 17.4                | 23.4 | ----- | 21.7    | 26.7 | ----- | 21.7     | 29.7 | ----- |
| Congestive Heart Failure.....              | 60                 | 10.0                | 13.6 | 5.4   | 18.3    | 22.2 | 7.3   | 21.7     | 28.6 | 9.0   |
| Pneumonia/Influenza.....                   | 28                 | 21.4                | 16.0 | ----- | 35.7    | 22.6 | ----- | 39.3     | 27.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11                 | 0.0                 | 10.6 | ----- | 9.1     | 19.5 | ----- | 27.3     | 25.5 | ----- |
| Transient Cerebral Ischemia.....           | 5                  | 0.0                 | 1.1  | ----- | 0.0     | 2.9  | ----- | 0.0      | 4.9  | ----- |
| Stroke.....                                | 35                 | 17.1                | 13.9 | ----- | 25.7    | 20.9 | ----- | 31.4     | 24.9 | ----- |
| Hip Fracture.....                          | 24                 | 8.3                 | 5.4  | ----- | 8.3     | 10.2 | ----- | 16.7     | 13.7 | ----- |
| Sepsis.....                                | 51                 | 35.3                | 26.4 | 6.6   | 58.8    | 37.0 | 8.9   | 70.6     | 42.8 | 10.0  |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 18                 | 0.0                 | 2.5  | ----- | 0.0     | 3.5  | ----- | 0.0      | 4.5  | ----- |
| Coronary Artery Bypass Graft.....          | 60                 | 8.3                 | 4.8  | 3.3   | 13.3    | 6.8  | 4.8   | 16.7     | 7.7  | 5.4   |
| Initial Pacemaker Insertion.....           | 4                  | 0.0                 | 2.5  | ----- | 25.0    | 5.4  | ----- | 25.0     | 8.1  | ----- |
| Carotid Endarterectomy.....                | 1                  | 0.0                 | 1.5  | ----- | 0.0     | 2.6  | ----- | 0.0      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 12                 | 16.7                | 3.8  | ----- | 16.7    | 7.3  | ----- | 25.0     | 9.9  | ----- |
| Open Reduction of Hip Fracture.....        | 10                 | 10.0                | 5.2  | ----- | 10.0    | 9.8  | ----- | 20.0     | 12.9 | ----- |
| Prostatectomy.....                         | 18                 | 0.0                 | 1.6  | ----- | 0.0     | 4.0  | ----- | 5.6      | 6.8  | ----- |
| Cholecystectomy.....                       | 13                 | 7.7                 | 6.3  | ----- | 15.4    | 12.2 | ----- | 23.1     | 16.2 | ----- |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 1.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# DETROIT OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230150

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.2 years  
Proportion female..... 54.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 72.8 %  
Transferred from skilled nursing facility..... 11.6 %  
Admitted for elective procedure..... 8.1 %  
Admitted for emergency..... 1.7 %

### COMORBIDITIES:

Cancer..... 9.1 %  
Chronic cardiovascular disease..... 31.7 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 9.1 %  
Chronic pulmonary disease..... 14.6 %  
Cerebrovascular degeneration..... 7.0 %  
Diabetes mellitus..... 13.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 90.8%  
State ..... 8.2%  
Outside State ..... 1.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 188  
Occupancy Rate ..... 78.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 50.7 %  
Case Mix Index (CMI) ..... 1.6669

### STAFFING:

Total Number of Physicians..... 140  
Percent of Physicians Board  
Certified Specialists ..... 58.6 %  
Medical Residents/Interns ..... 101  
Registered Nurses..... 120  
Licensed Practical Nurses ..... 46

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DETROIT REC HOSPITAL & UNIV HLTH CENTER

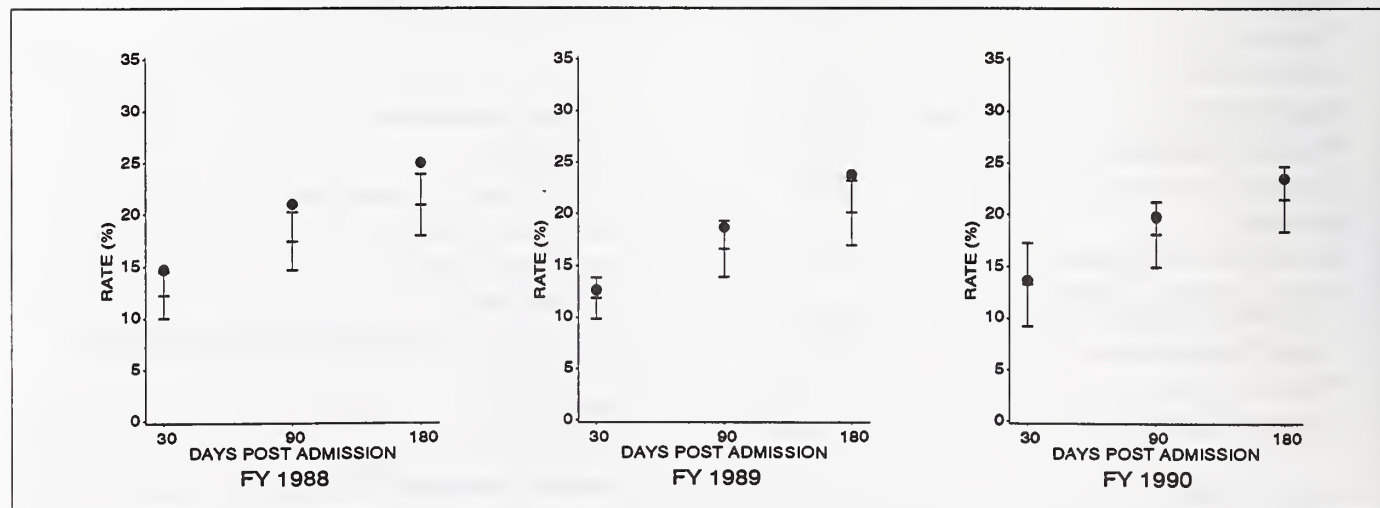
4201 ST ANTOINE  
DETROIT, MI 48201  
Medicare Provider Number: 230273

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1314            | 13.6                | 13.2 | 2.0  | 19.8    | 18.1 | 1.6  | 23.5     | 21.5 | 1.6  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 26              | 26.9                | 20.9 | ---- | 30.8    | 23.8 | ---- | 34.6     | 26.3 | ---- |
| Congestive Heart Failure.....              | 84              | 7.1                 | 13.0 | 6.0  | 16.7    | 20.9 | 6.5  | 22.6     | 26.7 | 8.7  |
| Pneumonia/Influenza.....                   | 35              | 14.3                | 16.3 | ---- | 22.9    | 22.1 | ---- | 25.7     | 25.6 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 9.1                 | 9.2  | ---- | 18.2    | 15.0 | ---- | 18.2     | 19.2 | ---- |
| Transient Cerebral Ischemia.....           | 13              | 0.0                 | 1.2  | ---- | 7.7     | 2.9  | ---- | 7.7      | 4.9  | ---- |
| Stroke.....                                | 106             | 17.9                | 21.4 | 4.5  | 28.3    | 27.0 | 4.7  | 30.2     | 30.3 | 4.7  |
| Hip Fracture.....                          | 32              | 6.3                 | 5.8  | ---- | 15.6    | 10.4 | ---- | 18.8     | 13.5 | ---- |
| Sepsis.....                                | 6               | 33.3                | 38.9 | ---- | 50.0    | 49.9 | ---- | 66.7     | 56.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 3               | 0.0                 | 8.7  | ---- | 33.3    | 9.8  | ---- | 33.3     | 11.1 | ---- |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 5.5  | ---- | 0.0     | 9.6  | ---- | 0.0      | 12.9 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 8               | 12.5                | 6.3  | ---- | 25.0    | 10.8 | ---- | 25.0     | 14.0 | ---- |
| Open Reduction of Hip Fracture.....        | 18              | 0.0                 | 4.6  | ---- | 5.6     | 8.7  | ---- | 5.6      | 11.5 | ---- |
| Prostatectomy.....                         | 9               | 0.0                 | 2.6  | ---- | 22.2    | 6.3  | ---- | 22.2     | 10.6 | ---- |
| Cholecystectomy.....                       | 14              | 7.1                 | 6.6  | ---- | 7.1     | 13.0 | ---- | 14.3     | 18.2 | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# DETROIT REC HOSPITAL & UNIV HLTH CENTER

Medicare Provider Number: 230273

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 69.6 years  
Proportion female..... 44.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.2 %  
Admitted for emergency..... 97.1 %

### COMORBIDITIES:

Cancer..... 4.3 %  
Chronic cardiovascular disease..... 33.7 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 5.9 %  
Chronic pulmonary disease..... 9.4 %  
Cerebrovascular degeneration..... 7.3 %  
Diabetes mellitus..... 7.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 94.1%  
State ..... 3.7%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 290  
Occupancy Rate ..... 82.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.9 %  
Case Mix Index (CMI) ..... 1.3835

### STAFFING:

Total Number of Physicians..... 172  
Percent of Physicians Board  
Certified Specialists..... 76.7 %  
Medical Residents/Interns ..... 127  
Registered Nurses..... 330  
Licensed Practical Nurses ..... 91

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... Yes  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DETROIT RIVERVIEW HOSPITAL

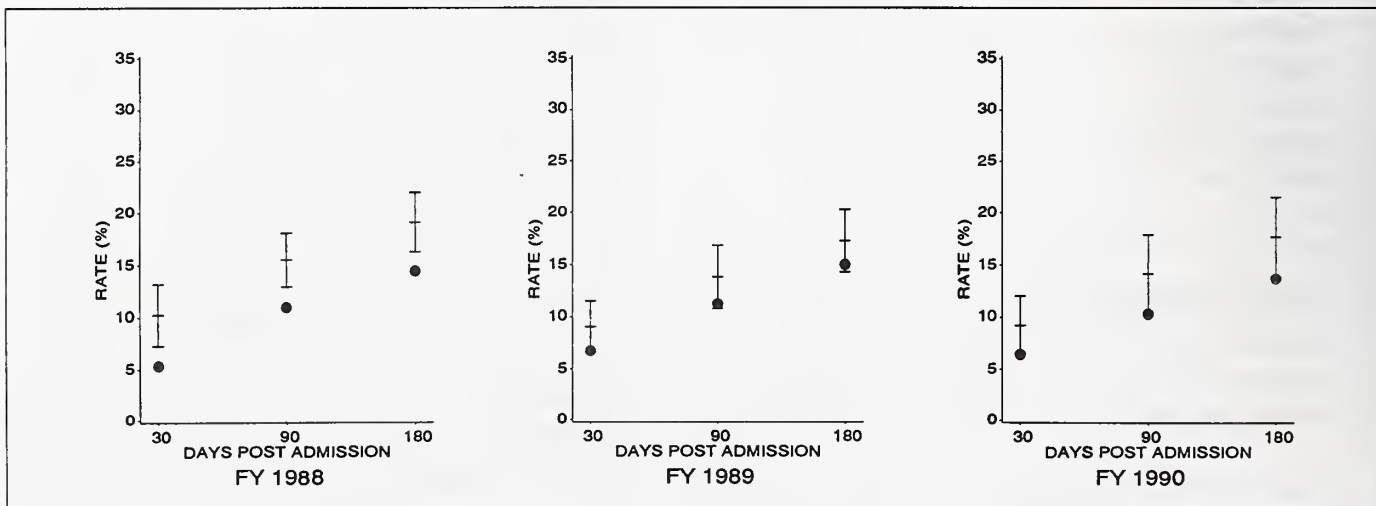
7733 E JEFFERSON  
DETROIT, MI 48214  
Medicare Provider Number: 230119

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 765             | 6.4                 | 9.2  | 1.4  | 10.3    | 14.2 | 1.9  | 13.7     | 17.7 | 1.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 13              | 23.1                | 27.8 | ---- | 23.1    | 30.1 | ---- | 23.1     | 32.2 | ---- |
| Congestive Heart Failure.....              | 74              | 12.2                | 13.6 | 4.7  | 14.9    | 21.7 | 7.0  | 21.6     | 27.8 | 7.2  |
| Pneumonia/Influenza.....                   | 28              | 25.0                | 19.3 | ---- | 32.1    | 26.3 | ---- | 32.1     | 30.6 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 7.9  | ---- | 0.0     | 13.5 | ---- | 0.0      | 18.3 | ---- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.2  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.8  | ---- |
| Stroke.....                                | 28              | 7.1                 | 16.9 | ---- | 14.3    | 23.7 | ---- | 17.9     | 27.3 | ---- |
| Hip Fracture.....                          | 10              | 0.0                 | 6.1  | ---- | 0.0     | 10.8 | ---- | 10.0     | 14.5 | ---- |
| Sepsis.....                                | 12              | 0.0                 | 23.6 | ---- | 8.3     | 35.2 | ---- | 33.3     | 41.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 3               | 0.0                 | 5.0  | ---- | 0.0     | 9.7  | ---- | 0.0      | 13.5 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 8               | 0.0                 | 4.3  | ---- | 0.0     | 7.7  | ---- | 12.5     | 10.5 | ---- |
| Open Reduction of Hip Fracture.....        | 4               | 0.0                 | 3.7  | ---- | 0.0     | 6.9  | ---- | 0.0      | 9.2  | ---- |
| Prostatectomy.....                         | 38              | 0.0                 | 1.4  | ---- | 5.3     | 3.3  | ---- | 5.3      | 5.5  | ---- |
| Cholecystectomy.....                       | 5               | 0.0                 | 1.9  | ---- | 0.0     | 4.2  | ---- | 20.0     | 6.5  | ---- |
| Hysterectomy.....                          | 3               | 0.0                 | 1.2  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# DETROIT RIVERVIEW HOSPITAL

Medicare Provider Number: 230119

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.3 years  
Proportion female..... 52.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.3 %  
Admitted for emergency..... 54.8 %

### COMORBIDITIES:

Cancer..... 5.8 %  
Chronic cardiovascular disease..... 43.8 %  
Chronic liver disease..... 1.7 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 16.3 %  
Cerebrovascular degeneration..... 7.2 %  
Diabetes mellitus..... 13.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 89.7%  
State..... 9.0%  
Outside State..... 1.3%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 10.2 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 560  
Occupancy Rate..... 63.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 35.0 %  
Case Mix Index (CMI)..... 1.1594

### STAFFING:

Total Number of Physicians..... 370  
Percent of Physicians Board  
Certified Specialists..... 80.3 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 384  
Licensed Practical Nurses..... 103

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... Yes  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes  
Rehabilitation..... Yes  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DICKINSON COUNTY MEMORIAL HOSPITAL

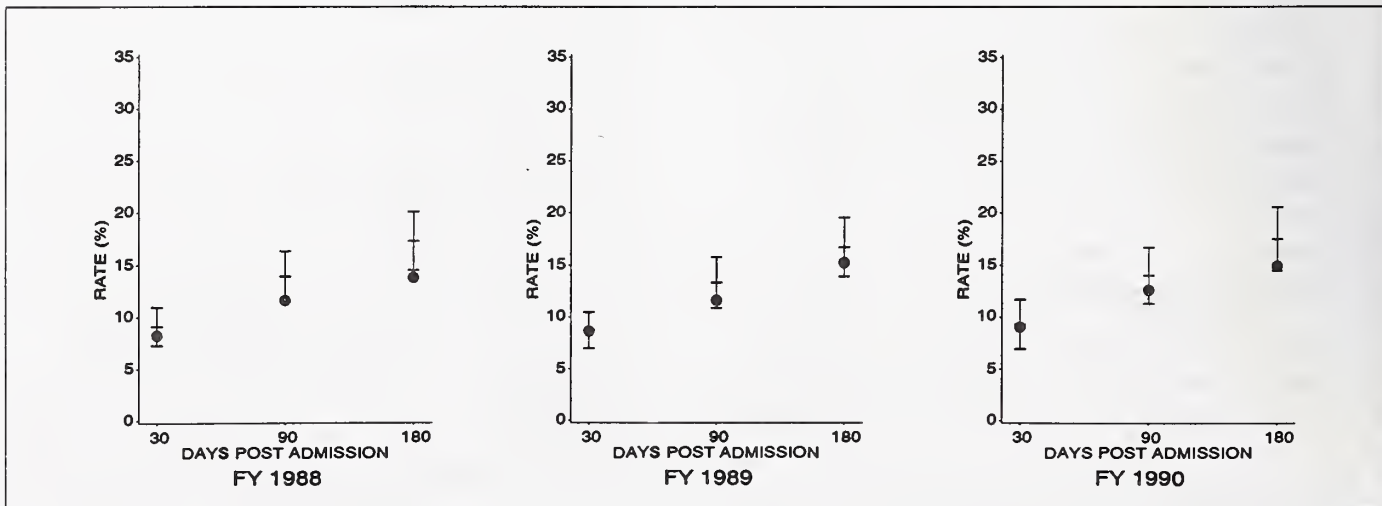
400 WOODWARD AVENUE  
IRON MOUNTAIN, MI 49801  
Medicare Provider Number: 230055

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1075            | 9.0                 | 9.3  | 1.2   | 12.6    | 14.0 | 1.4   | 14.9     | 17.5 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 38              | 36.8                | 30.0 | ----- | 42.1    | 33.0 | ----- | 42.1     | 35.7 | ----- |
| Congestive Heart Failure.....              | 56              | 19.6                | 16.2 | 7.8   | 33.9    | 25.7 | 12.3  | 41.1     | 32.3 | 13.5  |
| Pneumonia/Influenza.....                   | 61              | 11.5                | 16.9 | 5.9   | 16.4    | 23.0 | 7.2   | 21.3     | 26.9 | 8.8   |
| Chronic Obstructive Pulmonary Disease..... | 8               | 0.0                 | 9.2  | ----- | 0.0     | 15.1 | ----- | 0.0      | 18.8 | ----- |
| Transient Cerebral Ischemia.....           | 13              | 0.0                 | 1.7  | ----- | 0.0     | 3.9  | ----- | 0.0      | 6.5  | ----- |
| Stroke.....                                | 43              | 16.3                | 19.4 | ----- | 20.9    | 26.6 | ----- | 23.3     | 30.8 | ----- |
| Hip Fracture.....                          | 36              | 8.3                 | 7.7  | ----- | 13.9    | 13.1 | ----- | 13.9     | 16.7 | ----- |
| Sepsis.....                                | 14              | 35.7                | 18.7 | ----- | 42.9    | 24.0 | ----- | 42.9     | 28.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 2.4  | ----- | 0.0     | 4.9  | ----- | 14.3     | 7.7  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 12              | 0.0                 | 7.4  | ----- | 0.0     | 13.0 | ----- | 8.3      | 16.5 | ----- |
| Open Reduction of Hip Fracture.....        | 23              | 8.7                 | 6.6  | ----- | 13.0    | 11.6 | ----- | 13.0     | 15.4 | ----- |
| Prostatectomy.....                         | 34              | 0.0                 | 1.1  | ----- | 0.0     | 2.6  | ----- | 0.0      | 4.4  | ----- |
| Cholecystectomy.....                       | 18              | 0.0                 | 1.8  | ----- | 0.0     | 3.0  | ----- | 0.0      | 3.7  | ----- |
| Hysterectomy.....                          | 12              | 0.0                 | 1.0  | ----- | 8.3     | 2.2  | ----- | 8.3      | 3.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# DICKINSON COUNTY MEMORIAL HOSPITAL

Medicare Provider Number: 230055

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.5 years |
| Proportion female.....        | 60.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 35.3 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 6.4 %  |
| Admitted for emergency.....                    | 58.2 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.3 %  |
| Chronic cardiovascular disease..... | 43.7 % |
| Chronic liver disease.....          | 1.4 %  |
| Chronic renal disease.....          | 2.4 %  |
| Chronic pulmonary disease.....      | 14.9 % |
| Cerebrovascular degeneration.....   | 4.5 %  |
| Diabetes mellitus.....              | 8.5 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 61.3%  |
| State .....         | 10.5%  |
| Outside State ..... | 28.2%  |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.5 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                  |
|----------------------------|------------------|
| Total Beds .....           | 85               |
| Occupancy Rate .....       | 58.0 %           |
| Ownership/Control.....     | Local Government |
| Medicare Discharges .....  | 42.7 %           |
| Case Mix Index (CMI) ..... | 1.0857           |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 45     |
| Percent of Physicians Board<br>Certified Specialists ..... | 80.0 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 86     |
| Licensed Practical Nurses .....                            | 41     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# DOCTORS HOSPITAL

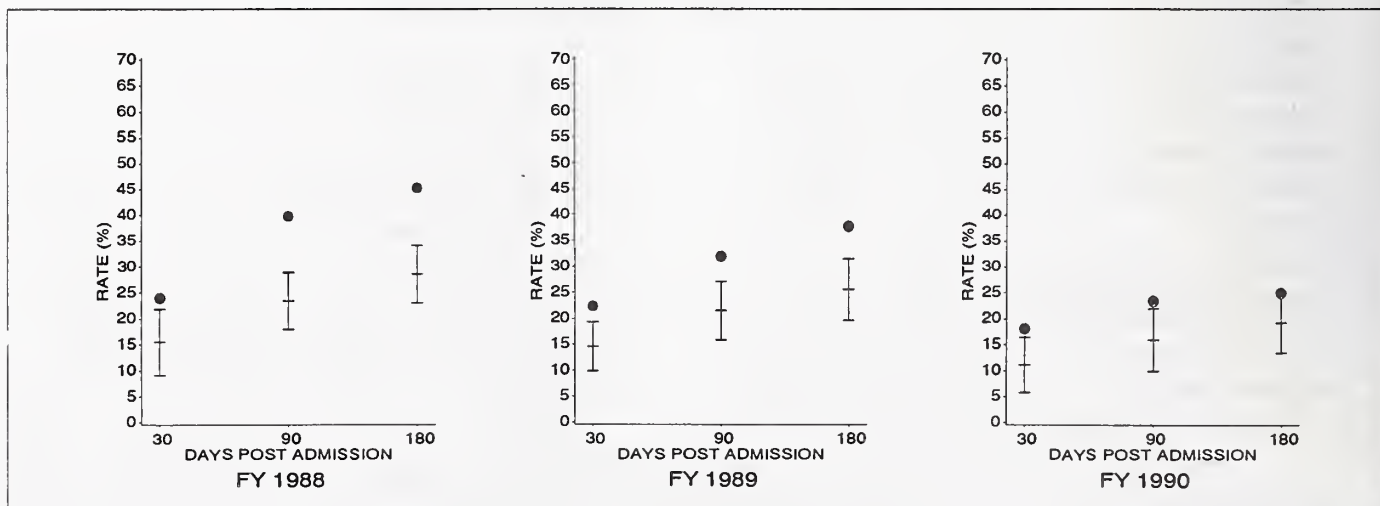
2730 E JEFFERSON AVE  
DETROIT, MI 48207  
Medicare Provider Number: 230090

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 265             | 18.1                | 11.1 | 2.7   | 23.4    | 15.9 | 3.0   | 24.9     | 19.2 | 2.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 7               | 28.6                | 38.4 | ----- | 28.6    | 40.9 | ----- | 28.6     | 43.4 | ----- |
| Congestive Heart Failure.....              | 14              | 14.3                | 14.4 | ----- | 28.6    | 22.7 | ----- | 28.6     | 28.9 | ----- |
| Pneumonia/Influenza.....                   | 14              | 28.6                | 15.7 | ----- | 42.9    | 21.9 | ----- | 50.0     | 25.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 4               | 0.0                 | 13.0 | ----- | 0.0     | 19.8 | ----- | 25.0     | 23.9 | ----- |
| Transient Cerebral Ischemia.....           | 4               | 25.0                | 2.3  | ----- | 25.0    | 5.5  | ----- | 25.0     | 9.6  | ----- |
| Stroke.....                                | 11              | 18.2                | 18.1 | ----- | 27.3    | 24.3 | ----- | 27.3     | 28.2 | ----- |
| Hip Fracture.....                          | 3               | 0.0                 | 6.8  | ----- | 0.0     | 11.4 | ----- | 0.0      | 14.5 | ----- |
| Sepsis.....                                | 7               | 42.9                | 26.9 | ----- | 42.9    | 32.2 | ----- | 57.1     | 36.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 1               | 0.0                 | 9.7  | ----- | 0.0     | 17.1 | ----- | 0.0      | 22.7 | ----- |
| Open Reduction of Hip Fracture.....        | 1               | 0.0                 | 5.8  | ----- | 0.0     | 9.3  | ----- | 0.0      | 11.0 | ----- |
| Prostatectomy.....                         | 3               | 0.0                 | 2.2  | ----- | 0.0     | 5.2  | ----- | 0.0      | 9.3  | ----- |
| Cholecystectomy.....                       | 5               | 0.0                 | 0.8  | ----- | 0.0     | 1.6  | ----- | 0.0      | 2.1  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# DOCTORS HOSPITAL

Medicare Provider Number: 230090

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.3 years  
 Proportion female..... 49.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 10.6 %  
 Transferred from skilled nursing facility..... 0.0 %  
 Admitted for elective procedure..... 12.5 %  
 Admitted for emergency..... 11.7 %

### COMORBIDITIES:

Cancer..... 7.2 %  
 Chronic cardiovascular disease..... 35.5 %  
 Chronic liver disease..... 1.9 %  
 Chronic renal disease..... 1.9 %  
 Chronic pulmonary disease..... 7.5 %  
 Cerebrovascular degeneration..... 8.3 %  
 Diabetes mellitus..... 9.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 94.6%  
 State..... 4.0%  
 Outside State..... 1.4%  
 Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 8.1 Days  
 State..... 8.5 Days  
 National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1989

### PROFILE:

Total Beds..... 101  
 Occupancy Rate..... 48.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges..... 18.9 %  
 Case Mix Index (CMI)..... 1.0978

### STAFFING:

Total Number of Physicians..... 13  
 Percent of Physicians Board  
 Certified Specialists..... 46.2 %  
 Medical Residents/Interns..... 0  
 Registered Nurses..... 38  
 Licensed Practical Nurses..... 11

### SPECIALTY SERVICES:

Burn Unit..... No  
 Cardiac Intensive Care..... No  
 Comprehensive Geriatric..... Yes  
 Hospice Care..... No  
 Medical/Surgical Intensive Care..... Yes  
 Organ/Tissue Transplant..... No  
 Other Intensive Care..... Yes  
 Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes  
 Rehabilitation..... No  
 Psychiatric..... No  
 Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# DOCTORS HOSPITAL OF JACKSON

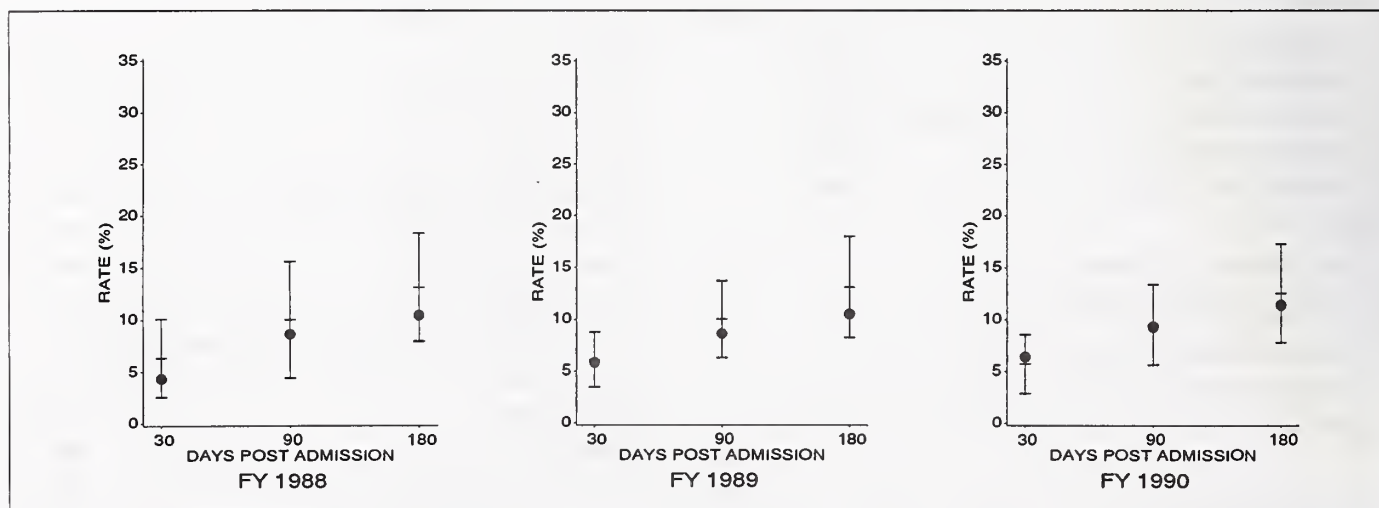
110 N ELM AVENUE  
JACKSON, MI 49202  
Medicare Provider Number: 230184

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 343             | 6.4                 | 5.7  | 1.4  | 9.3     | 9.5  | 2.0  | 11.4     | 12.5 | 2.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 6               | 16.7                | 14.5 | ---- | 16.7    | 18.2 | ---- | 16.7     | 21.0 | ---- |
| Congestive Heart Failure.....              | 9               | 0.0                 | 11.7 | ---- | 0.0     | 18.9 | ---- | 0.0      | 24.2 | ---- |
| Pneumonia/Influenza.....                   | 6               | 33.3                | 9.5  | ---- | 33.3    | 12.9 | ---- | 33.3     | 15.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 16.7                | 5.2  | ---- | 16.7    | 8.7  | ---- | 16.7     | 11.8 | ---- |
| Transient Cerebral Ischemia.....           | 3               | 33.3                | 3.3  | ---- | 33.3    | 7.5  | ---- | 33.3     | 12.9 | ---- |
| Stroke.....                                | 6               | 0.0                 | 19.8 | ---- | 16.7    | 26.6 | ---- | 16.7     | 30.6 | ---- |
| Hip Fracture.....                          | 4               | 0.0                 | 3.1  | ---- | 25.0    | 6.0  | ---- | 25.0     | 8.6  | ---- |
| Sepsis.....                                | 1               | 0.0                 | 21.9 | ---- | 0.0     | 25.5 | ---- | 0.0      | 28.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 2.6  | ---- | 20.0    | 5.2  | ---- | 20.0     | 7.4  | ---- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 57              | 0.0                 | 0.7  | 1.2  | 0.0     | 1.9  | 2.3  | 0.0      | 3.4  | 3.5  |
| Cholecystectomy.....                       | 13              | 0.0                 | 1.1  | ---- | 0.0     | 2.0  | ---- | 0.0      | 2.8  | ---- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.2  | ---- | 0.0     | 0.6  | ---- | 0.0      | 1.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# DOCTORS HOSPITAL OF JACKSON

Medicare Provider Number: 230184

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.6 years

Proportion female..... 55.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 97.4 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 50.1 %

Admitted for emergency..... 2.3 %

### COMORBIDITIES:

Cancer..... 7.0 %

Chronic cardiovascular disease..... 23.9 %

Chronic liver disease..... 0.6 %

Chronic renal disease..... 2.6 %

Chronic pulmonary disease..... 34.7 %

Cerebrovascular degeneration..... 1.2 %

Diabetes mellitus..... 5.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 86.5%

State..... 11.8%

Outside State ..... 1.7%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.5 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 75

Occupancy Rate ..... 20.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 45.9 %

Case Mix Index (CMI) ..... 1.1328

### STAFFING:

Total Number of Physicians..... 39

Percent of Physicians Board  
Certified Specialists..... 56.4 %

Medical Residents/Interns ..... 0

Registered Nurses..... 31

Licensed Practical Nurses ..... 20

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# EATON RAPIDS COMMUNITY HOSPITAL

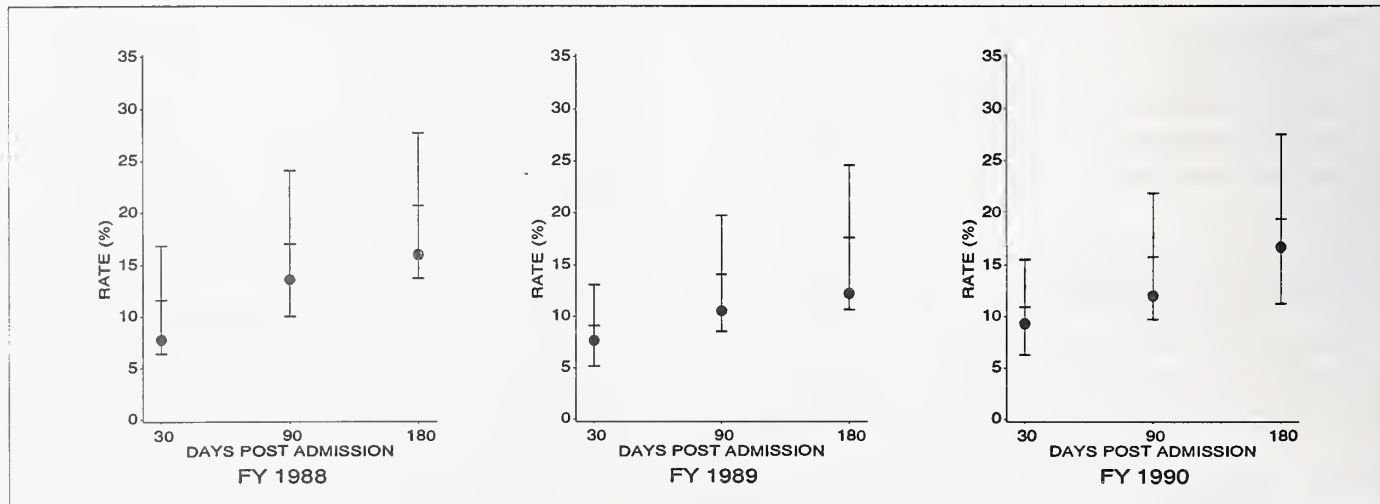
1500 SOUTH MAIN STREET  
EATON RAPIDS, MI 48827  
Medicare Provider Number: 230153

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 216             | 9.3                 | 10.9 | 2.3  | 12.0    | 15.8 | 3.0  | 16.7     | 19.4 | 4.1  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 11              | 45.5                | 32.6 | ---- | 54.5    | 35.4 | ---- | 63.6     | 38.6 | ---- |
| Congestive Heart Failure.....              | 20              | 5.0                 | 14.9 | ---- | 10.0    | 22.2 | ---- | 15.0     | 27.9 | ---- |
| Pneumonia/Influenza.....                   | 14              | 7.1                 | 12.8 | ---- | 14.3    | 17.3 | ---- | 14.3     | 21.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 11.1                | 13.0 | ---- | 22.2    | 20.5 | ---- | 22.2     | 25.6 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 1.6  | ---- | 0.0     | 3.8  | ---- | 0.0      | 6.4  | ---- |
| Stroke.....                                | 7               | 28.6                | 22.0 | ---- | 28.6    | 30.0 | ---- | 42.9     | 34.3 | ---- |
| Hip Fracture.....                          | 5               | 0.0                 | 14.7 | ---- | 0.0     | 22.1 | ---- | 0.0      | 26.4 | ---- |
| Sepsis.....                                | 1               | 100.0               | 18.6 | ---- | 100.0   | 23.7 | ---- | 100.0    | 29.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 5               | 0.0                 | 13.0 | ---- | 0.0     | 20.4 | ---- | 0.0      | 24.8 | ---- |
| Prostatectomy.....                         | 4               | 0.0                 | 1.1  | ---- | 0.0     | 2.6  | ---- | 0.0      | 4.7  | ---- |
| Cholecystectomy.....                       | 3               | 0.0                 | 0.9  | ---- | 0.0     | 1.5  | ---- | 0.0      | 2.0  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 1.0  | ---- | 0.0     | 2.5  | ---- | 0.0      | 4.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# EATON RAPIDS COMMUNITY HOSPITAL

Medicare Provider Number: 230153

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.6 years  
Proportion female..... 59.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 3.2 %  
Admitted for emergency..... 72.7 %

### COMORBIDITIES:

Cancer..... 5.6 %  
Chronic cardiovascular disease..... 52.8 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 3.2 %  
Chronic pulmonary disease..... 14.8 %  
Cerebrovascular degeneration..... 3.7 %  
Diabetes mellitus..... 13.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 57.5%  
State ..... 39.8%  
Outside State ..... 2.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.6 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 35  
Occupancy Rate ..... 22.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.9 %  
Case Mix Index (CMI) ..... 1.0642

### STAFFING:

Total Number of Physicians..... 60  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 21  
Licensed Practical Nurses ..... 10

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# EDWARD W SPARROW HOSPITAL

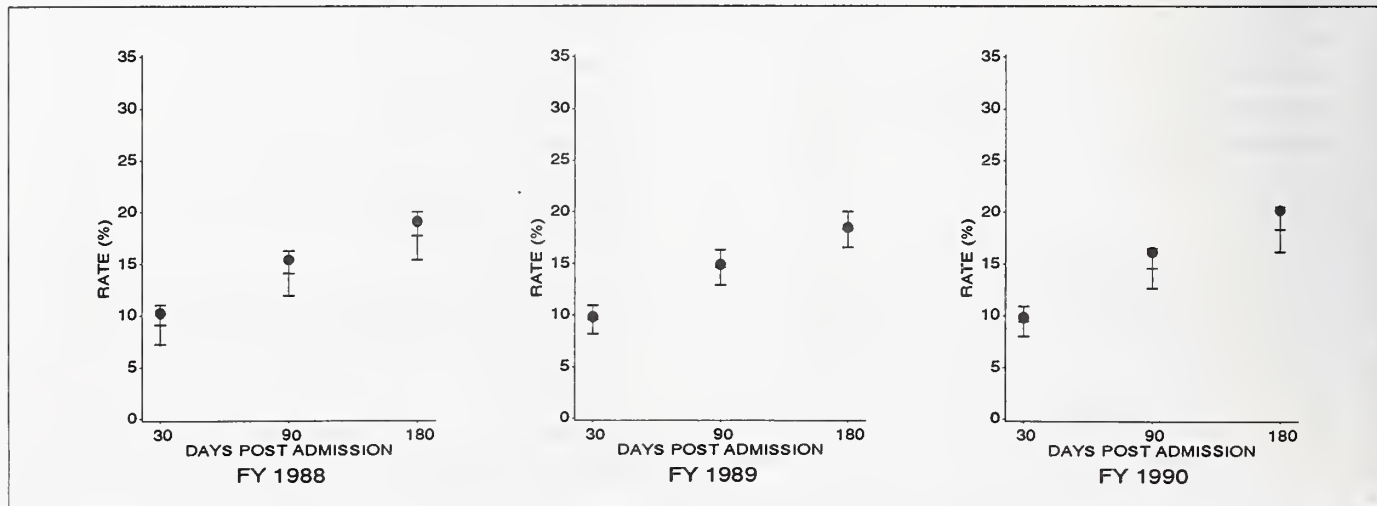
1215 E MICHIGAN AVENUE  
LANSING, MI 48912  
Medicare Provider Number: 230230

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2409            | 9.8                 | 9.4  | 0.7  | 16.2    | 14.6 | 1.0  | 20.2     | 18.4 | 1.1  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 59              | 20.3                | 27.3 | 7.5  | 20.3    | 30.3 | 8.0  | 22.0     | 33.1 | 8.8  |
| Congestive Heart Failure.....              | 103             | 15.5                | 14.1 | 3.7  | 29.1    | 22.5 | 5.7  | 38.8     | 28.9 | 7.0  |
| Pneumonia/Influenza.....                   | 89              | 12.4                | 15.7 | 5.1  | 21.3    | 21.6 | 4.6  | 28.1     | 25.5 | 5.3  |
| Chronic Obstructive Pulmonary Disease..... | 24              | 8.3                 | 8.3  | ---- | 20.8    | 14.1 | ---- | 20.8     | 18.2 | ---- |
| Transient Cerebral Ischemia.....           | 31              | 3.2                 | 2.4  | ---- | 16.1    | 5.1  | ---- | 19.4     | 7.6  | ---- |
| Stroke.....                                | 82              | 22.0                | 20.9 | 5.0  | 32.9    | 28.6 | 7.3  | 37.8     | 32.6 | 7.2  |
| Hip Fracture.....                          | 71              | 9.9                 | 6.7  | 4.4  | 14.1    | 12.0 | 5.1  | 16.9     | 15.6 | 5.7  |
| Sepsis.....                                | 34              | 17.6                | 28.0 | ---- | 32.4    | 36.4 | ---- | 44.1     | 40.7 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 18              | 5.6                 | 2.9  | ---- | 5.6     | 5.2  | ---- | 11.1     | 7.2  | ---- |
| Carotid Endarterectomy.....                | 23              | 0.0                 | 1.6  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.2  | ---- |
| Hip Replacement/Reconstruction.....        | 49              | 6.1                 | 3.4  | ---- | 6.1     | 6.0  | ---- | 10.2     | 8.0  | ---- |
| Open Reduction of Hip Fracture.....        | 34              | 2.9                 | 6.1  | ---- | 5.9     | 11.3 | ---- | 5.9      | 14.9 | ---- |
| Prostatectomy.....                         | 102             | 1.0                 | 0.7  | 1.1  | 3.9     | 1.8  | 1.7  | 6.9      | 3.1  | 2.5  |
| Cholecystectomy.....                       | 46              | 0.0                 | 2.3  | ---- | 4.3     | 4.0  | ---- | 4.3      | 5.1  | ---- |
| Hysterectomy.....                          | 39              | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 2.6      | 1.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# EDWARD W SPARROW HOSPITAL

Medicare Provider Number: 230230

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.7 years  
Proportion female..... 58.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 49.5 %  
Transferred from skilled nursing facility..... 1.1 %  
Admitted for elective procedure..... 23.0 %  
Admitted for emergency..... 29.8 %

### COMORBIDITIES:

Cancer..... 11.8 %  
Chronic cardiovascular disease..... 26.6 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 5.3 %  
Chronic pulmonary disease..... 11.4 %  
Cerebrovascular degeneration..... 2.9 %  
Diabetes mellitus..... 6.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 67.7%  
State ..... 29.7%  
Outside State ..... 2.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 479  
Occupancy Rate ..... 67.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.6 %  
Case Mix Index (CMI) ..... 1.2599

### STAFFING:

Total Number of Physicians..... 277  
Percent of Physicians Board  
Certified Specialists..... 98.9 %  
Medical Residents/Interns ..... 57  
Registered Nurses..... 687  
Licensed Practical Nurses ..... 97

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... Yes  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# EMMA L BIXBY MEDICAL CENTER

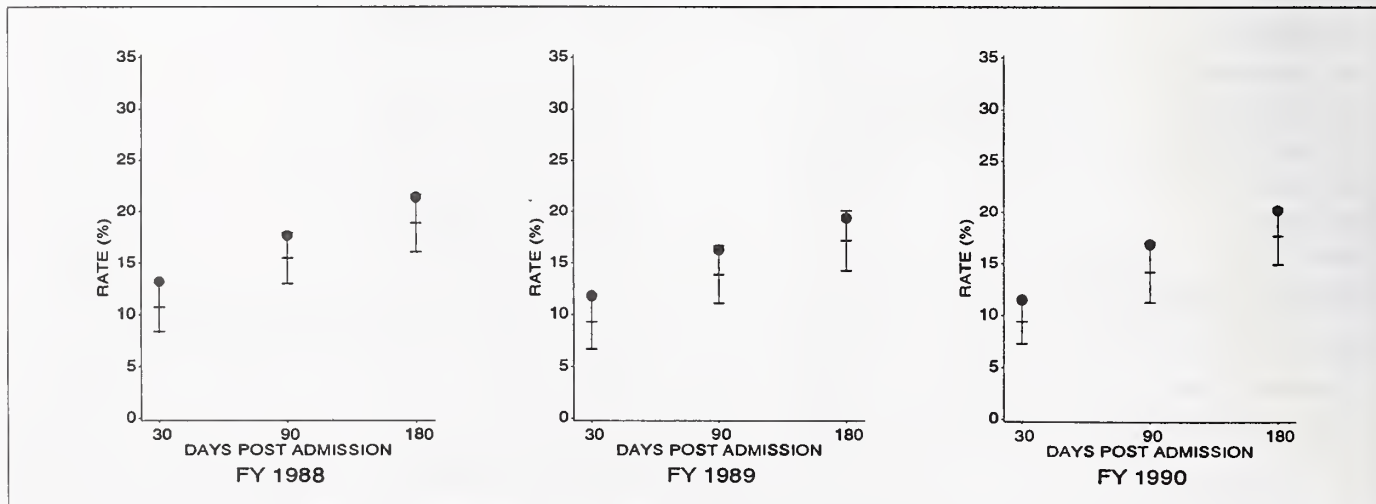
818 RIVERSIDE AVE  
ADRIAN, MI 49221  
Medicare Provider Number: 230005

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1077               | 11.5                | 9.4  | 1.1  | 16.9    | 14.2 | 1.5  | 20.2     | 17.7 | 1.4  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 42                 | 33.3                | 29.1 | ---- | 40.5    | 31.8 | ---- | 40.5     | 34.6 | ---- |
| Congestive Heart Failure.....              | 52                 | 17.3                | 14.8 | 5.4  | 25.0    | 23.2 | 7.9  | 30.8     | 29.3 | 6.8  |
| Pneumonia/Influenza.....                   | 78                 | 15.4                | 14.6 | 4.2  | 17.9    | 20.5 | 5.1  | 23.1     | 24.4 | 5.5  |
| Chronic Obstructive Pulmonary Disease..... | 14                 | 7.1                 | 7.0  | ---- | 14.3    | 12.6 | ---- | 21.4     | 17.3 | ---- |
| Transient Cerebral Ischemia.....           | 10                 | 0.0                 | 2.0  | ---- | 20.0    | 4.4  | ---- | 20.0     | 6.9  | ---- |
| Stroke.....                                | 35                 | 17.1                | 21.6 | ---- | 25.7    | 28.2 | ---- | 34.3     | 31.8 | ---- |
| Hip Fracture.....                          | 59                 | 6.8                 | 5.8  | 3.4  | 10.2    | 10.6 | 4.0  | 13.6     | 14.0 | 4.5  |
| Sepsis.....                                | 30                 | 30.0                | 25.5 | ---- | 36.7    | 33.2 | ---- | 43.3     | 38.1 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 2                  | 0.0                 | 1.5  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.0  | ---- |
| Hip Replacement/Reconstruction.....        | 25                 | 12.0                | 2.7  | ---- | 12.0    | 5.5  | ---- | 12.0     | 7.7  | ---- |
| Open Reduction of Hip Fracture.....        | 39                 | 5.1                 | 5.6  | ---- | 10.3    | 10.6 | ---- | 15.4     | 14.2 | ---- |
| Prostatectomy.....                         | 60                 | 1.7                 | 1.0  | 1.4  | 5.0     | 2.4  | 2.7  | 5.0      | 4.1  | 3.0  |
| Cholecystectomy.....                       | 23                 | 0.0                 | 1.4  | ---- | 0.0     | 2.6  | ---- | 0.0      | 3.6  | ---- |
| Hysterectomy.....                          | 16                 | 0.0                 | 0.8  | ---- | 0.0     | 2.0  | ---- | 0.0      | 3.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# EMMA L BIXBY MEDICAL CENTER

Medicare Provider Number: 230005

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.0 years

Proportion female..... 58.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.6 %

Transferred from skilled nursing facility..... 1.0 %

Admitted for elective procedure..... 28.7 %

Admitted for emergency..... 56.9 %

### COMORBIDITIES:

Cancer..... 8.2 %

Chronic cardiovascular disease..... 28.4 %

Chronic liver disease..... 0.6 %

Chronic renal disease..... 2.9 %

Chronic pulmonary disease..... 11.2 %

Cerebrovascular degeneration..... 3.4 %

Diabetes mellitus..... 6.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 88.6%

State ..... 8.4%

Outside State ..... 3.0%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.0 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 165

Occupancy Rate ..... 54.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 29.4 %

Case Mix Index (CMI) ..... 1.1671

### STAFFING:

Total Number of Physicians..... 65

Percent of Physicians Board  
Certified Specialists..... 52.3 %

Medical Residents/Interns ..... 0

Registered Nurses..... 134

Licensed Practical Nurses ..... 62

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FERGUSON HOSPITAL

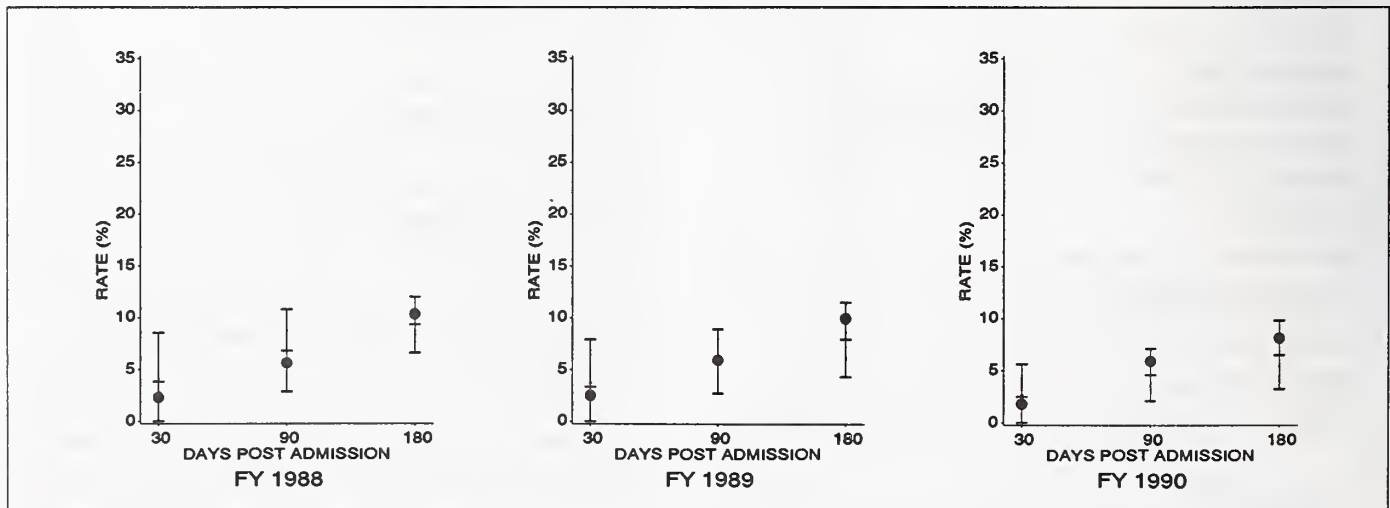
72 SHELDON BLVD S E  
GRAND RAPIDS, MI 49502  
Medicare Provider Number: 230237

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 454             | 1.8                 | 2.5  | 1.6   | 5.9     | 4.6  | 1.3   | 8.1      | 6.5  | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 2               | 50.0                | 13.7 | ----- | 50.0    | 21.3 | ----- | 50.0     | 26.2 | ----- |
| Pneumonia/Influenza.....                   | 0               |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 1               | 0.0                 | 5.3  | ----- | 0.0     | 9.3  | ----- | 0.0      | 14.3 | ----- |
| Transient Cerebral Ischemia.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 1               | 0.0                 | 32.8 | ----- | 100.0   | 44.2 | ----- | 100.0    | 49.1 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 3               | 33.3                | 17.4 | ----- | 33.3    | 22.1 | ----- | 33.3     | 25.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 83              | 0.0                 | 0.4  | 1.0   | 2.4     | 0.8  | 1.6   | 2.4      | 1.5  | 2.4   |
| Cholecystectomy.....                       | 6               | 0.0                 | 1.0  | ----- | 0.0     | 1.9  | ----- | 0.0      | 2.8  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# FERGUSON HOSPITAL

Medicare Provider Number: 230237

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.3 years

Proportion female..... 44.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 97.6 %

Transferred from skilled nursing facility..... 0.4 %

Admitted for elective procedure..... 80.2 %

Admitted for emergency..... 0.2 %

### COMORBIDITIES:

Cancer..... 3.7 %

Chronic cardiovascular disease..... 9.9 %

Chronic liver disease..... 0.4 %

Chronic renal disease..... 0.9 %

Chronic pulmonary disease..... 7.3 %

Cerebrovascular degeneration..... 0.4 %

Diabetes mellitus..... 3.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 41.6%

State ..... 56.5%

Outside State ..... 1.9%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 63

Occupancy Rate ..... 41.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 39.7 %

Case Mix Index (CMI) ..... 1.0821

### STAFFING:

Total Number of Physicians..... 36

Percent of Physicians Board  
Certified Specialists ..... 100.0 %

Medical Residents/Interns ..... 7

Registered Nurses..... 57

Licensed Practical Nurses ..... 18

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... Yes

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FLINT OSTEOPATHIC HOSPITAL

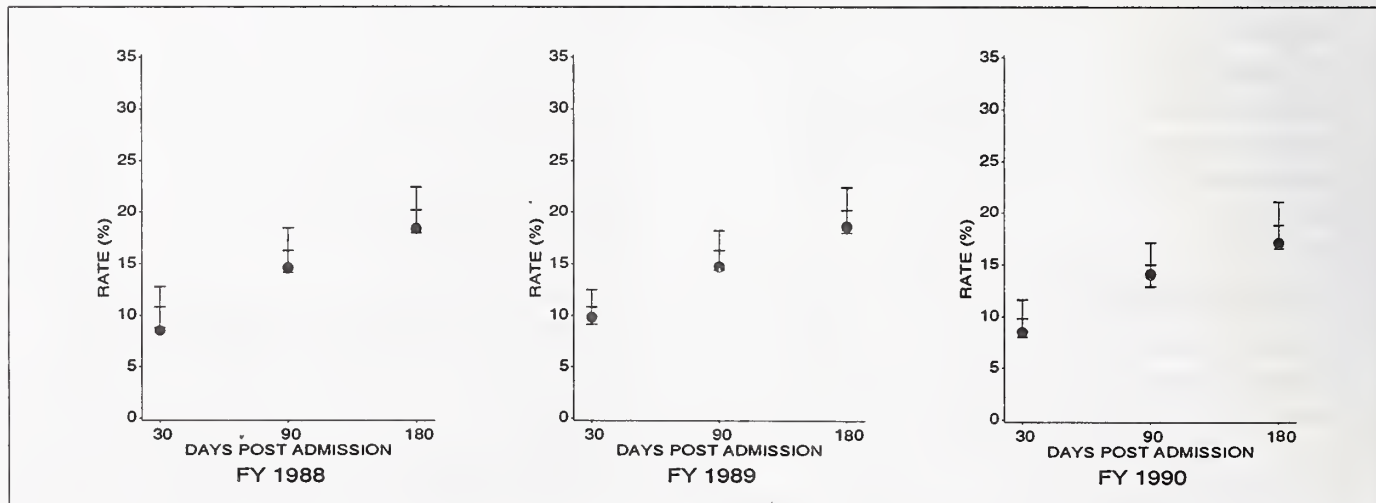
3921 BEECHER RD  
FLINT, MI 48502  
Medicare Provider Number: 230197

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2392            | 8.5                 | 9.8  | 0.9   | 14.1    | 15.0 | 1.1   | 17.1     | 18.8 | 1.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 60              | 33.3                | 23.8 | 7.7   | 35.0    | 28.1 | 7.2   | 40.0     | 31.6 | 7.6   |
| Congestive Heart Failure.....              | 118             | 8.5                 | 14.1 | 6.7   | 15.3    | 22.6 | 7.8   | 22.9     | 29.2 | 7.5   |
| Pneumonia/Influenza.....                   | 101             | 11.9                | 14.1 | 3.9   | 16.8    | 19.3 | 5.5   | 18.8     | 22.9 | 5.2   |
| Chronic Obstructive Pulmonary Disease..... | 54              | 5.6                 | 10.6 | 7.5   | 16.7    | 17.5 | 8.3   | 22.2     | 22.7 | 6.6   |
| Transient Cerebral Ischemia.....           | 67              | 1.5                 | 2.5  | 2.4   | 4.5     | 5.6  | 4.1   | 7.5      | 8.9  | 4.9   |
| Stroke.....                                | 84              | 11.9                | 19.7 | 7.2   | 21.4    | 27.4 | 8.5   | 22.6     | 31.4 | 8.9   |
| Hip Fracture.....                          | 52              | 15.4                | 7.4  | 8.4   | 17.3    | 13.0 | 8.2   | 21.2     | 16.7 | 7.5   |
| Sepsis.....                                | 24              | 33.3                | 26.5 | ----- | 37.5    | 32.5 | ----- | 45.8     | 36.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 21              | 9.5                 | 1.9  | ----- | 9.5     | 3.8  | ----- | 14.3     | 5.6  | ----- |
| Carotid Endarterectomy.....                | 19              | 10.5                | 2.8  | ----- | 10.5    | 5.2  | ----- | 10.5     | 7.4  | ----- |
| Hip Replacement/Reconstruction.....        | 39              | 12.8                | 3.6  | ----- | 12.8    | 6.4  | ----- | 12.8     | 8.4  | ----- |
| Open Reduction of Hip Fracture.....        | 27              | 11.1                | 7.0  | ----- | 14.8    | 12.5 | ----- | 22.2     | 16.3 | ----- |
| Prostatectomy.....                         | 53              | 0.0                 | 0.7  | 1.2   | 0.0     | 1.5  | 2.0   | 1.9      | 2.5  | 2.5   |
| Cholecystectomy.....                       | 36              | 11.1                | 2.6  | ----- | 13.9    | 4.5  | ----- | 13.9     | 5.7  | ----- |
| Hysterectomy.....                          | 11              | 0.0                 | 0.8  | ----- | 9.1     | 1.7  | ----- | 9.1      | 2.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# FLINT OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230197

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.7 years  
Proportion female..... 60.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician.... 36.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 16.6 %  
Admitted for emergency..... 62.2 %

### COMORBIDITIES:

Cancer..... 7.2 %  
Chronic cardiovascular disease..... 50.5 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 7.4 %  
Chronic pulmonary disease..... 25.7 %  
Cerebrovascular degeneration..... 5.1 %  
Diabetes mellitus..... 12.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 85.6%  
State ..... 12.3%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 359  
Occupancy Rate ..... 57.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 28.2 %  
Case Mix Index (CMI) ..... 1.2099

### STAFFING:

Total Number of Physicians..... 152  
Percent of Physicians Board  
Certified Specialists ..... 44.1 %  
Medical Residents/Interns ..... 68  
Registered Nurses..... 219  
Licensed Practical Nurses ..... 112

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# FRANCIS A BELL MEMORIAL HOSPITAL

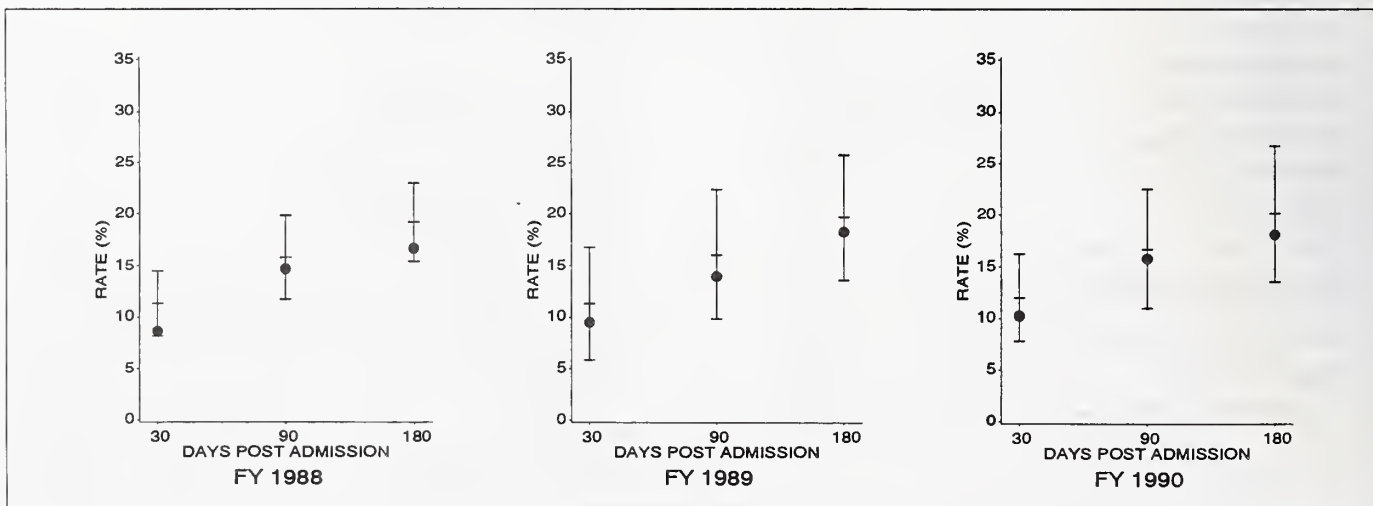
101 S 4TH ST  
ISHPEMING, MI 49849  
Medicare Provider Number: 230001

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 519             | 10.2                | 12.0 | 2.1   | 15.8    | 16.7 | 2.9   | 18.1     | 20.1 | 3.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 29              | 27.6                | 29.0 | ----- | 34.5    | 31.7 | ----- | 37.9     | 34.3 | ----- |
| Congestive Heart Failure.....              | 31              | 6.5                 | 16.2 | ----- | 22.6    | 23.1 | ----- | 29.0     | 29.4 | ----- |
| Pneumonia/Influenza.....                   | 44              | 13.6                | 15.5 | ----- | 13.6    | 20.9 | ----- | 18.2     | 24.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 16              | 25.0                | 8.8  | ----- | 31.3    | 14.8 | ----- | 31.3     | 19.1 | ----- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 3.4  | ----- | 16.7    | 6.8  | ----- | 16.7     | 10.2 | ----- |
| Stroke.....                                | 26              | 7.7                 | 20.3 | ----- | 7.7     | 25.8 | ----- | 7.7      | 29.4 | ----- |
| Hip Fracture.....                          | 15              | 20.0                | 6.9  | ----- | 33.3    | 11.9 | ----- | 33.3     | 15.3 | ----- |
| Sepsis.....                                | 14              | 7.1                 | 20.0 | ----- | 7.1     | 25.5 | ----- | 7.1      | 28.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 3.4  | ----- | 25.0    | 6.9  | ----- | 25.0     | 9.8  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 10              | 30.0                | 7.0  | ----- | 40.0    | 13.4 | ----- | 40.0     | 17.9 | ----- |
| Open Reduction of Hip Fracture.....        | 6               | 16.7                | 7.6  | ----- | 33.3    | 13.2 | ----- | 33.3     | 17.3 | ----- |
| Prostatectomy.....                         | 12              | 8.3                 | 1.2  | ----- | 8.3     | 2.9  | ----- | 16.7     | 4.8  | ----- |
| Cholecystectomy.....                       | 16              | 0.0                 | 3.1  | ----- | 0.0     | 6.5  | ----- | 6.3      | 9.7  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# FRANCIS A BELL MEMORIAL HOSPITAL

Medicare Provider Number: 230001

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.7 years |
| Proportion female.....        | 58.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 36.8 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 10.8 % |
| Admitted for emergency.....                    | 75.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.2 %  |
| Chronic cardiovascular disease..... | 43.4 % |
| Chronic liver disease.....          | 1.2 %  |
| Chronic renal disease.....          | 2.5 %  |
| Chronic pulmonary disease.....      | 13.5 % |
| Cerebrovascular degeneration.....   | 3.5 %  |
| Diabetes mellitus.....              | 10.4 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 96.4%  |
| State .....         | 2.6%   |
| Outside State ..... | 1.0%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 69                  |
| Occupancy Rate .....       | 39.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 39.4 %              |
| Case Mix Index (CMI) ..... | 1.2527              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 36     |
| Percent of Physicians Board<br>Certified Specialists ..... | 86.1 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 39     |
| Licensed Practical Nurses .....                            | 36     |

### SPECIALTY SERVICES:

|                                      |     |
|--------------------------------------|-----|
| Burn Unit .....                      | No  |
| Cardiac Intensive Care .....         | No  |
| Comprehensive Geriatric .....        | No  |
| Hospice Care .....                   | No  |
| Medical/Surgical Intensive Care..... | Yes |
| Organ/Tissue Transplant .....        | No  |
| Other Intensive Care .....           | No  |
| Trauma Center .....                  | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# GARDEN CITY OSTEOPATHIC HOSPITAL

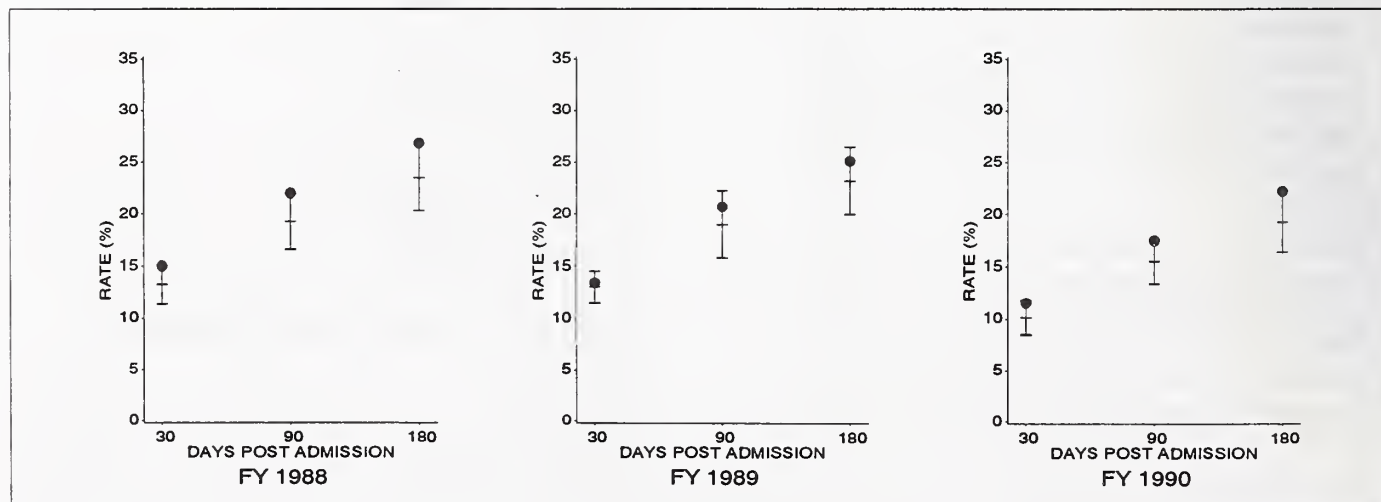
6245 NORTH INKSTER RD  
GARDEN CITY, MI 48135  
Medicare Provider Number: 230244

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2301            | 11.5                | 10.1 | 0.8  | 17.5    | 15.5 | 1.1  | 22.2     | 19.3 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 88              | 27.3                | 19.6 | 9.0  | 29.5    | 22.8 | 9.5  | 34.1     | 25.6 | 9.6  |
| Congestive Heart Failure.....              | 154             | 9.1                 | 14.6 | 5.8  | 19.5    | 23.4 | 5.1  | 27.3     | 29.5 | 4.4  |
| Pneumonia/Influenza.....                   | 89              | 28.1                | 17.7 | 6.1  | 36.0    | 24.6 | 6.8  | 42.7     | 29.2 | 7.7  |
| Chronic Obstructive Pulmonary Disease..... | 34              | 11.8                | 6.5  | ---- | 20.6    | 11.8 | ---- | 26.5     | 16.1 | ---- |
| Transient Cerebral Ischemia.....           | 43              | 0.0                 | 2.0  | ---- | 4.7     | 4.5  | ---- | 4.7      | 7.4  | ---- |
| Stroke.....                                | 120             | 21.7                | 19.8 | 4.0  | 29.2    | 26.8 | 7.3  | 35.0     | 30.6 | 7.3  |
| Hip Fracture.....                          | 76              | 3.9                 | 6.0  | 3.5  | 11.8    | 10.8 | 3.8  | 14.5     | 14.0 | 4.1  |
| Sepsis.....                                | 33              | 24.2                | 26.3 | ---- | 36.4    | 37.9 | ---- | 45.5     | 43.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 7               | 14.3                | 2.6  | ---- | 14.3    | 4.7  | ---- | 14.3     | 6.9  | ---- |
| Carotid Endarterectomy.....                | 3               | 33.3                | 2.9  | ---- | 33.3    | 4.5  | ---- | 33.3     | 6.0  | ---- |
| Hip Replacement/Reconstruction.....        | 37              | 2.7                 | 3.7  | ---- | 8.1     | 6.8  | ---- | 8.1      | 9.3  | ---- |
| Open Reduction of Hip Fracture.....        | 40              | 2.5                 | 6.0  | ---- | 10.0    | 11.1 | ---- | 15.0     | 14.5 | ---- |
| Prostatectomy.....                         | 81              | 0.0                 | 0.9  | 1.2  | 2.5     | 2.1  | 2.4  | 2.5      | 3.6  | 2.9  |
| Cholecystectomy.....                       | 48              | 2.1                 | 2.4  | ---- | 2.1     | 4.1  | ---- | 2.1      | 5.1  | ---- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.6  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GARDEN CITY OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230244

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.6 years  
Proportion female..... 56.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 12.3 %  
Admitted for emergency..... 73.0 %

### COMORBIDITIES:

Cancer..... 8.0 %  
Chronic cardiovascular disease..... 35.1 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 4.0 %  
Chronic pulmonary disease..... 21.1 %  
Cerebrovascular degeneration..... 4.8 %  
Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.7%  
State ..... 4.9%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 263  
Occupancy Rate ..... 76.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 40.0 %  
Case Mix Index (CMI) ..... 1.3001

### STAFFING:

Total Number of Physicians..... 172  
Percent of Physicians Board  
Certified Specialists ..... 66.3 %  
Medical Residents/Interns ..... 52  
Registered Nurses..... 157  
Licensed Practical Nurses ..... 40

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GENESEE MEMORIAL HOSPITAL

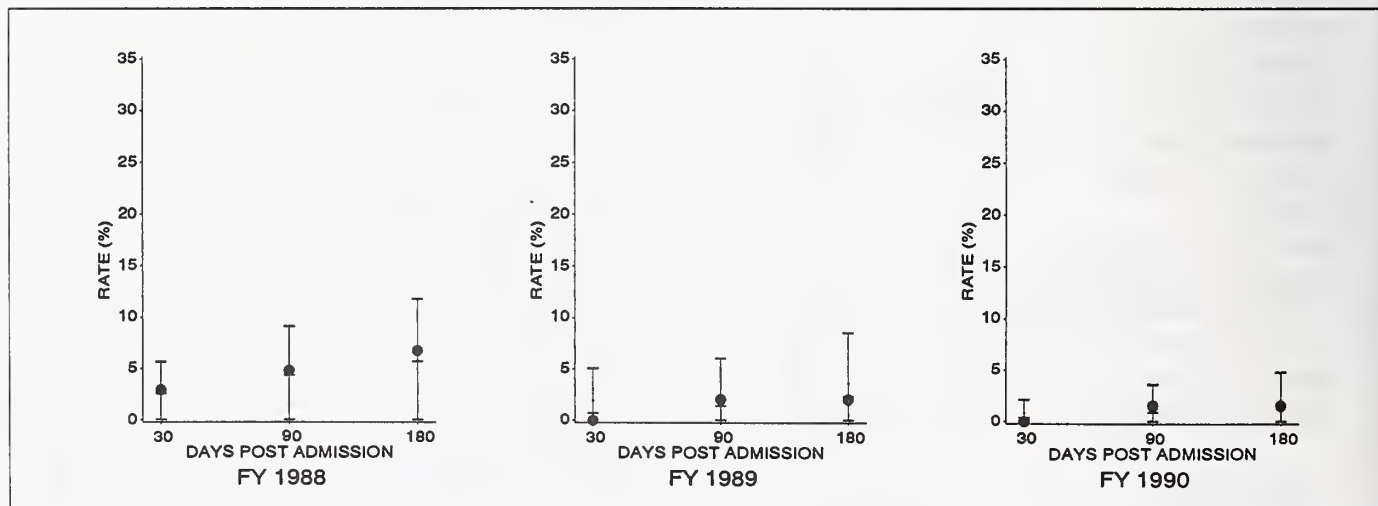
702 BALLENGER HWY  
FLINT, MI 48502  
Medicare Provider Number: 230114

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 66              | 0.0                 | 0.4  | 0.8   | 1.5     | 0.9  | 1.3   | 1.5      | 1.6  | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0               |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0               |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 13              | 0.0                 | 0.3  | ----- | 0.0     | 0.7  | ----- | 0.0      | 1.3  | ----- |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# GENESEE MEMORIAL HOSPITAL

Medicare Provider Number: 230114

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.0 years  
Proportion female..... 30.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 93.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 97.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 1.5 %  
Chronic cardiovascular disease..... 6.1 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 0.0 %  
Cerebrovascular degeneration..... 0.0 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 77.3%  
State..... 18.7%  
Outside State..... 4.0%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 1.8 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 41  
Occupancy Rate..... 2.4 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 26.6 %  
Case Mix Index (CMI)..... 0.8012

### STAFFING:

Total Number of Physicians..... 14  
Percent of Physicians Board  
Certified Specialists..... 92.9 %  
Medical Residents/Interns..... 2  
Registered Nurses..... 18  
Licensed Practical Nurses..... 2

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GERBER MEMORIAL HOSPITAL

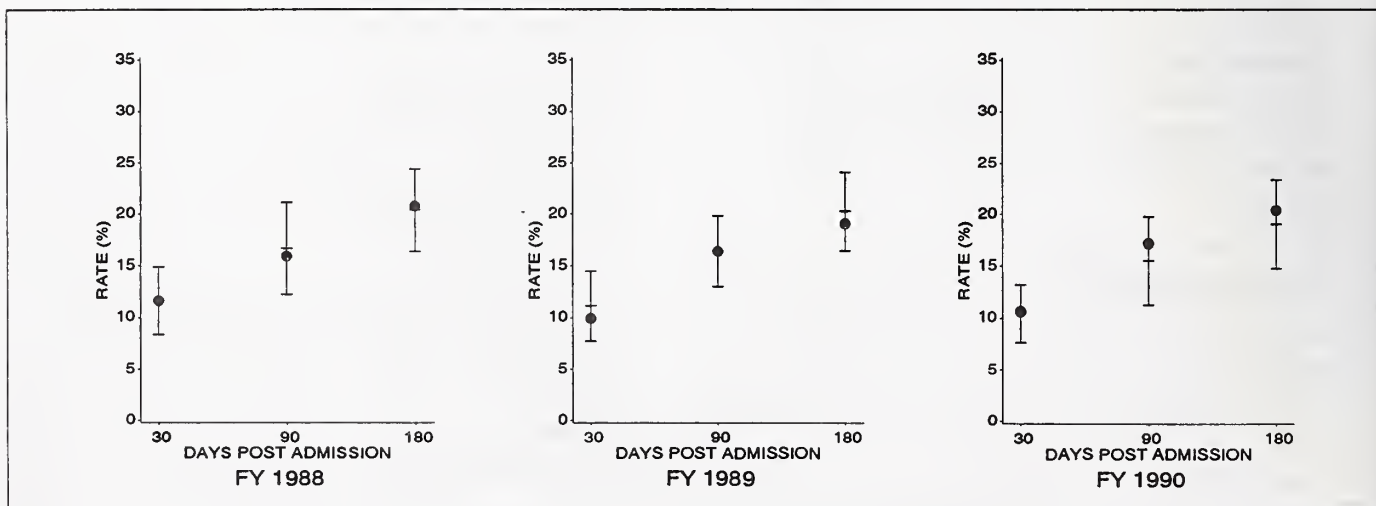
212 S SULLIVAN ST  
FREMONT, MI 49412  
Medicare Provider Number: 230106

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 501                | 10.6                | 10.4 | 1.4   | 17.2    | 15.5 | 2.1   | 20.4     | 19.1 | 2.2   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 20                 | 20.0                | 26.9 | ----- | 30.0    | 30.4 | ----- | 35.0     | 33.5 | ----- |
| Congestive Heart Failure.....              | 39                 | 28.2                | 15.9 | ----- | 38.5    | 24.9 | ----- | 51.3     | 31.3 | ----- |
| Pneumonia/Influenza.....                   | 58                 | 8.6                 | 14.5 | 7.6   | 19.0    | 19.8 | 6.1   | 20.7     | 23.3 | 6.2   |
| Chronic Obstructive Pulmonary Disease..... | 10                 | 0.0                 | 10.9 | ----- | 0.0     | 18.1 | ----- | 0.0      | 23.2 | ----- |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 14                 | 14.3                | 27.5 | ----- | 21.4    | 35.8 | ----- | 28.6     | 40.1 | ----- |
| Hip Fracture.....                          | 18                 | 0.0                 | 5.1  | ----- | 0.0     | 9.2  | ----- | 0.0      | 12.2 | ----- |
| Sepsis.....                                | 3                  | 33.3                | 27.4 | ----- | 33.3    | 33.1 | ----- | 33.3     | 35.8 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 11                 | 0.0                 | 2.3  | ----- | 0.0     | 4.5  | ----- | 0.0      | 6.3  | ----- |
| Open Reduction of Hip Fracture.....        | 10                 | 0.0                 | 5.3  | ----- | 0.0     | 10.0 | ----- | 0.0      | 13.4 | ----- |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 10                 | 0.0                 | 0.8  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.2  | ----- |
| Hysterectomy.....                          | 8                  | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GERBER MEMORIAL HOSPITAL

Medicare Provider Number: 230106

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.1 years  
Proportion female..... 62.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.3 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 0.8 %

### COMORBIDITIES:

Cancer..... 7.4 %  
Chronic cardiovascular disease..... 37.3 %  
Chronic liver disease..... 0.2 %  
Chronic renal disease..... 3.2 %  
Chronic pulmonary disease..... 14.4 %  
Cerebrovascular degeneration..... 3.0 %  
Diabetes mellitus..... 12.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 77.7%  
State..... 21.4%  
Outside State..... 0.9%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.6 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 73  
Occupancy Rate..... 41.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 36.7 %  
Case Mix Index (CMI)..... 1.1037

### STAFFING:

Total Number of Physicians..... 24  
Percent of Physicians Board  
Certified Specialists..... 62.5 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 76  
Licensed Practical Nurses..... 18

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GRACE HOSPITAL NORTHWESTERN UNIT

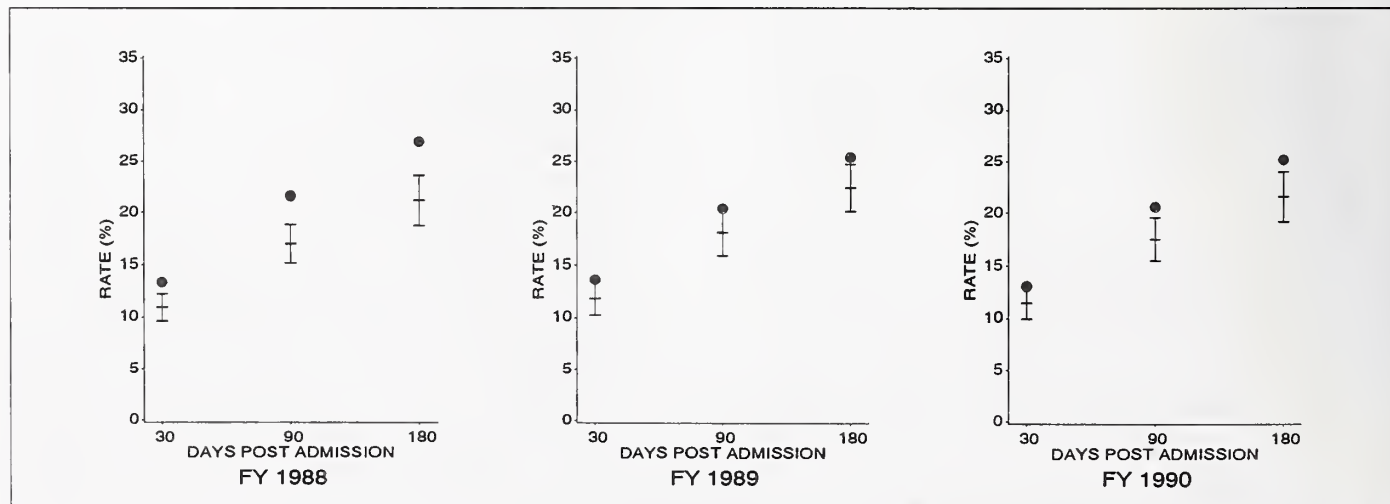
18700 MYERS RD  
DETROIT, MI 48235  
Medicare Provider Number: 230128

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2360            | 13.0                | 11.4 | 0.7   | 20.6    | 17.5 | 1.0   | 25.2     | 21.6 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 63              | 27.0                | 26.7 | 5.6   | 30.2    | 30.1 | 6.0   | 33.3     | 32.8 | 7.4   |
| Congestive Heart Failure.....              | 126             | 10.3                | 13.9 | 4.3   | 19.8    | 22.3 | 4.2   | 27.0     | 28.3 | 4.5   |
| Pneumonia/Influenza.....                   | 69              | 14.5                | 14.4 | 5.5   | 24.6    | 19.7 | 6.6   | 29.0     | 23.4 | 8.3   |
| Chronic Obstructive Pulmonary Disease..... | 20              | 0.0                 | 13.6 | ----- | 20.0    | 21.3 | ----- | 25.0     | 26.9 | ----- |
| Transient Cerebral Ischemia.....           | 35              | 0.0                 | 1.7  | ----- | 2.9     | 4.0  | ----- | 11.4     | 6.5  | ----- |
| Stroke.....                                | 74              | 21.6                | 18.1 | 5.3   | 28.4    | 24.6 | 6.1   | 32.4     | 27.8 | 6.4   |
| Hip Fracture.....                          | 46              | 8.7                 | 6.7  | ----- | 19.6    | 11.9 | ----- | 26.1     | 15.5 | ----- |
| Sepsis.....                                | 111             | 28.8                | 21.5 | 4.9   | 43.2    | 30.7 | 6.5   | 51.4     | 35.6 | 7.0   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 7.7                 | 2.7  | ----- | 15.4    | 5.3  | ----- | 15.4     | 7.9  | ----- |
| Carotid Endarterectomy.....                | 9               | 0.0                 | 1.6  | ----- | 11.1    | 3.1  | ----- | 11.1     | 4.5  | ----- |
| Hip Replacement/Reconstruction.....        | 24              | 0.0                 | 3.8  | ----- | 4.2     | 6.9  | ----- | 8.3      | 9.2  | ----- |
| Open Reduction of Hip Fracture.....        | 27              | 14.8                | 6.6  | ----- | 29.6    | 12.3 | ----- | 33.3     | 16.2 | ----- |
| Prostatectomy.....                         | 110             | 1.8                 | 1.0  | 1.3   | 3.6     | 2.4  | 1.8   | 4.5      | 4.0  | 1.9   |
| Cholecystectomy.....                       | 27              | 3.7                 | 1.2  | ----- | 3.7     | 2.4  | ----- | 3.7      | 3.6  | ----- |
| Hysterectomy.....                          | 20              | 0.0                 | 0.7  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# GRACE HOSPITAL NORTHWESTERN UNIT

Medicare Provider Number: 230128

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years

Proportion female..... 58.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.4 %

Transferred from skilled nursing facility..... 0.8 %

Admitted for elective procedure..... 12.5 %

Admitted for emergency..... 84.1 %

### COMORBIDITIES:

Cancer..... 8.6 %

Chronic cardiovascular disease..... 29.7 %

Chronic liver disease..... 0.7 %

Chronic renal disease..... 4.7 %

Chronic pulmonary disease..... 10.5 %

Cerebrovascular degeneration..... 2.5 %

Diabetes mellitus..... 11.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 80.4%

State ..... 17.9%

Outside State ..... 1.7%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.0 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 402

Ownership/Control..... Private, Non-Profit

Case Mix Index (CMI) ..... 1.3352

### STAFFING:

Medical Residents/Interns ..... 12

Registered Nurses..... 323

Licensed Practical Nurses ..... 60

### SPECIALTY SERVICES:

Burn Unit ..... No

Coronary Care Unit ..... Yes

Hospice Care ..... No

Intensive Care Unit ..... Yes

Organ Transplant ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GRAND TRAVERSE COMMUNITY HOSPITAL

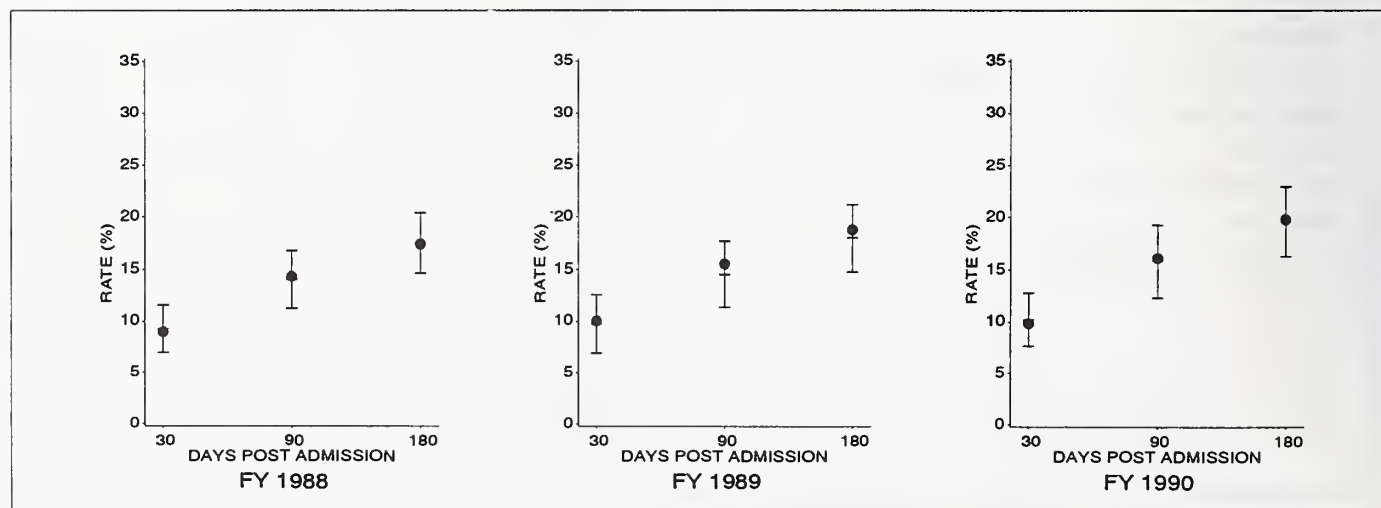
550 MUNSON AVENUE  
TRAVERSE CITY, MI 49684  
Medicare Provider Number: 230228

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 665             | 9.8                 | 10.2 | 1.3   | 16.1    | 15.8 | 1.7   | 19.8     | 19.6 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 27              | 33.3                | 19.1 | ----- | 37.0    | 22.9 | ----- | 40.7     | 25.9 | ----- |
| Congestive Heart Failure.....              | 53              | 13.2                | 14.5 | 8.4   | 20.8    | 23.6 | 9.4   | 26.4     | 30.1 | 9.5   |
| Pneumonia/Influenza.....                   | 42              | 11.9                | 16.0 | ----- | 16.7    | 22.5 | ----- | 19.0     | 26.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 14.3                | 15.6 | ----- | 28.6    | 25.9 | ----- | 28.6     | 32.2 | ----- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.4  | ----- | 16.7    | 3.4  | ----- | 33.3     | 5.4  | ----- |
| Stroke.....                                | 22              | 9.1                 | 17.3 | ----- | 13.6    | 24.7 | ----- | 22.7     | 28.9 | ----- |
| Hip Fracture.....                          | 17              | 11.8                | 8.9  | ----- | 11.8    | 15.7 | ----- | 17.6     | 20.1 | ----- |
| Sepsis.....                                | 11              | 54.5                | 26.8 | ----- | 63.6    | 36.0 | ----- | 63.6     | 40.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 100.0               | 2.0  | ----- | 100.0   | 4.4  | ----- | 100.0    | 7.0  | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 5.3  | ----- | 0.0     | 9.9  | ----- | 0.0      | 14.5 | ----- |
| Hip Replacement/Reconstruction.....        | 9               | 0.0                 | 0.9  | ----- | 0.0     | 1.8  | ----- | 0.0      | 2.5  | ----- |
| Open Reduction of Hip Fracture.....        | 14              | 14.3                | 8.7  | ----- | 14.3    | 15.8 | ----- | 21.4     | 20.5 | ----- |
| Prostatectomy.....                         | 13              | 0.0                 | 1.0  | ----- | 7.7     | 2.4  | ----- | 7.7      | 4.4  | ----- |
| Cholecystectomy.....                       | 11              | 9.1                 | 1.8  | ----- | 9.1     | 3.1  | ----- | 9.1      | 4.1  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GRAND TRAVERSE COMMUNITY HOSPITAL

Medicare Provider Number: 230228

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.8 years

Proportion female..... 56.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.1 %

Transferred from skilled nursing facility..... 0.2 %

Admitted for elective procedure..... 15.8 %

Admitted for emergency..... 81.2 %

### COMORBIDITIES:

Cancer..... 9.9 %

Chronic cardiovascular disease..... 31.7 %

Chronic liver disease..... 0.5 %

Chronic renal disease..... 4.7 %

Chronic pulmonary disease..... 22.9 %

Cerebrovascular degeneration..... 3.8 %

Diabetes mellitus..... 4.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 53.4%

State..... 44.2%

Outside State..... 2.4%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 7.5 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 82

Occupancy Rate..... 46.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges..... 36.5 %

Case Mix Index (CMI)..... 1.2660

### STAFFING:

Total Number of Physicians..... 57

Percent of Physicians Board  
Certified Specialists..... 43.9 %

Medical Residents/Interns..... 6

Registered Nurses..... 81

Licensed Practical Nurses..... 26

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GRAND VIEW HOSPITAL

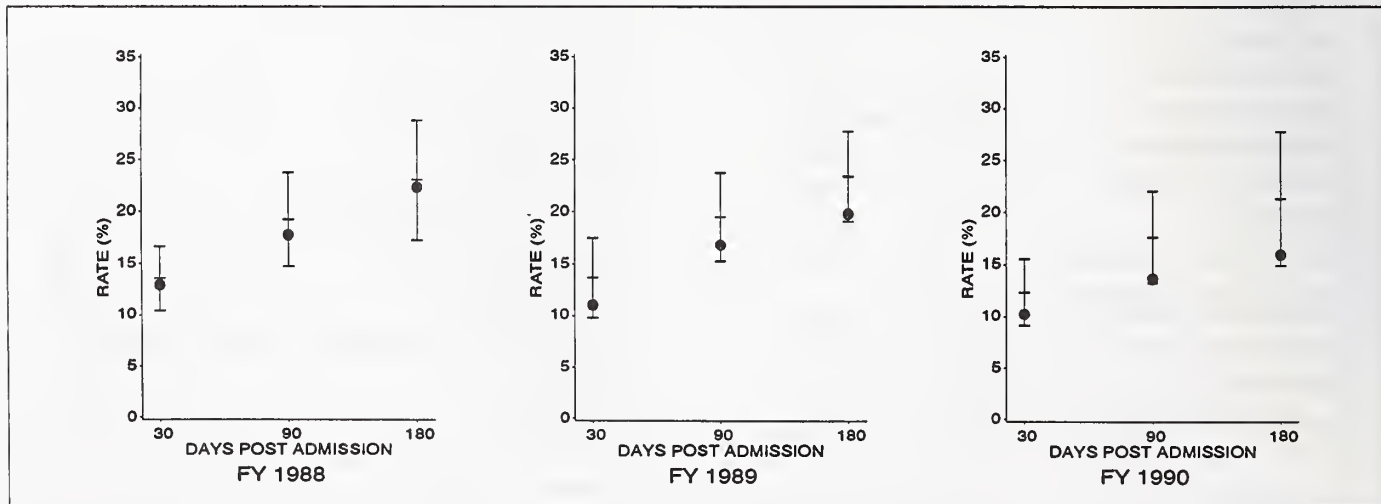
N10561 GRAND VIEW LANE  
IRONWOOD, MI 49938  
Medicare Provider Number: 230143

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 627             | 10.2                | 12.3 | 1.6  | 13.6    | 17.6 | 2.2  | 15.9     | 21.3 | 3.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 16              | 31.3                | 40.8 | ---- | 31.3    | 43.0 | ---- | 31.3     | 45.7 | ---- |
| Congestive Heart Failure.....              | 50              | 16.0                | 13.2 | ---- | 18.0    | 21.0 | ---- | 18.0     | 26.7 | ---- |
| Pneumonia/Influenza.....                   | 50              | 14.0                | 20.2 | ---- | 16.0    | 27.0 | ---- | 16.0     | 31.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 17              | 0.0                 | 5.1  | ---- | 5.9     | 9.3  | ---- | 11.8     | 13.1 | ---- |
| Transient Cerebral Ischemia.....           | 9               | 0.0                 | 1.0  | ---- | 0.0     | 2.4  | ---- | 11.1     | 4.1  | ---- |
| Stroke.....                                | 30              | 13.3                | 19.2 | ---- | 26.7    | 24.4 | ---- | 26.7     | 27.8 | ---- |
| Hip Fracture.....                          | 17              | 0.0                 | 6.2  | ---- | 5.9     | 10.6 | ---- | 17.6     | 14.2 | ---- |
| Sepsis.....                                | 8               | 0.0                 | 20.5 | ---- | 12.5    | 27.8 | ---- | 25.0     | 31.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 5               | 0.0                 | 1.1  | ---- | 0.0     | 2.1  | ---- | 0.0      | 3.2  | ---- |
| Hip Replacement/Reconstruction.....        | 3               | 0.0                 | 7.3  | ---- | 0.0     | 12.1 | ---- | 0.0      | 15.9 | ---- |
| Open Reduction of Hip Fracture.....        | 10              | 0.0                 | 5.3  | ---- | 0.0     | 9.4  | ---- | 10.0     | 13.1 | ---- |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 22              | 0.0                 | 2.6  | ---- | 4.5     | 5.0  | ---- | 4.5      | 6.9  | ---- |
| Hysterectomy.....                          | 11              | 0.0                 | 1.3  | ---- | 0.0     | 3.0  | ---- | 0.0      | 4.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# GRAND VIEW HOSPITAL

Medicare Provider Number: 230143

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.3 years  
Proportion female..... 58.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 74.5 %

### COMORBIDITIES:

Cancer..... 6.5 %  
Chronic cardiovascular disease..... 31.7 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 1.1 %  
Chronic pulmonary disease..... 14.4 %  
Cerebrovascular degeneration..... 5.1 %  
Diabetes mellitus..... 7.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 73.3%  
State ..... 5.9%  
Outside State ..... 20.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 53  
Occupancy Rate ..... 41.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 64.9 %  
Case Mix Index (CMI) ..... 1.2792

### STAFFING:

Total Number of Physicians..... 11  
Percent of Physicians Board  
Certified Specialists..... 81.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 20  
Licensed Practical Nurses ..... 13

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# GRATIOT COMMUNITY HOSPITAL

300 WARWICK DRIVE

ALMA, MI 48801

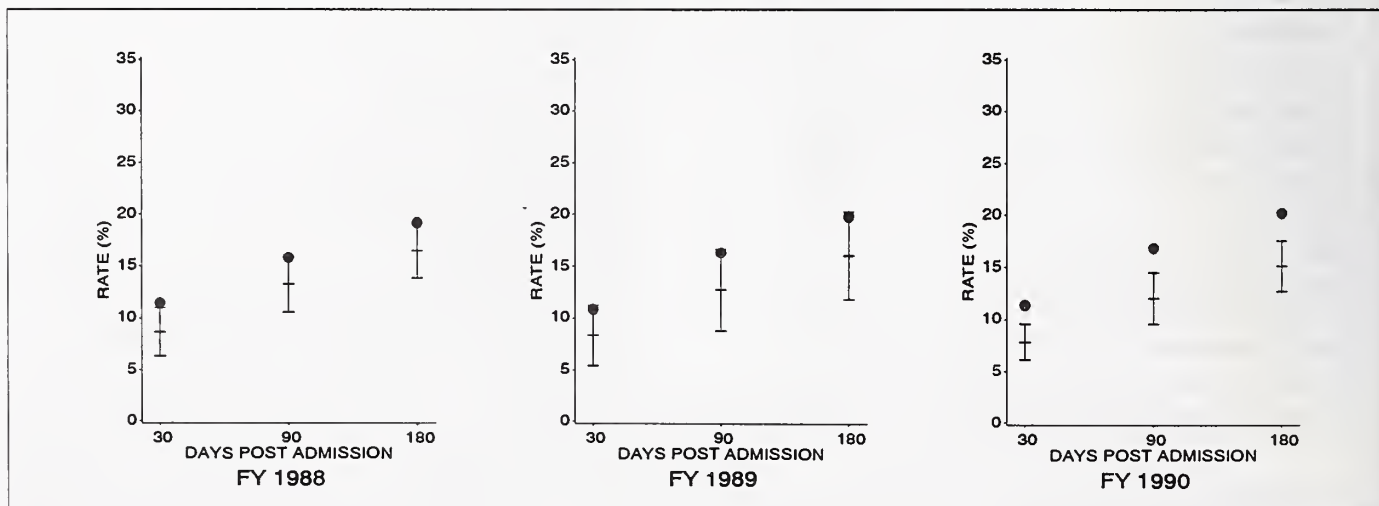
Medicare Provider Number: 230030

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1111               | 11.3                | 7.8  | 0.9   | 16.8    | 12.0 | 1.3   | 20.2     | 15.1 | 1.2   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 34                 | 32.4                | 23.3 | ----- | 35.3    | 26.2 | ----- | 38.2     | 28.8 | ----- |
| Congestive Heart Failure.....              | 65                 | 36.9                | 14.4 | 7.3   | 40.0    | 22.7 | 7.6   | 52.3     | 28.7 | 8.3   |
| Pneumonia/Influenza.....                   | 70                 | 12.9                | 14.4 | 4.5   | 20.0    | 19.8 | 5.4   | 24.3     | 23.7 | 5.2   |
| Chronic Obstructive Pulmonary Disease..... | 18                 | 0.0                 | 7.4  | ----- | 0.0     | 13.3 | ----- | 0.0      | 17.7 | ----- |
| Transient Cerebral Ischemia.....           | 23                 | 4.3                 | 1.2  | ----- | 8.7     | 2.8  | ----- | 13.0     | 4.7  | ----- |
| Stroke.....                                | 40                 | 17.5                | 17.2 | ----- | 27.5    | 23.6 | ----- | 37.5     | 27.4 | ----- |
| Hip Fracture.....                          | 41                 | 9.8                 | 5.0  | ----- | 17.1    | 9.0  | ----- | 22.0     | 12.3 | ----- |
| Sepsis.....                                | 17                 | 35.3                | 26.4 | ----- | 35.3    | 32.8 | ----- | 35.3     | 36.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 15                 | 6.7                 | 4.0  | ----- | 13.3    | 7.7  | ----- | 13.3     | 10.9 | ----- |
| Carotid Endarterectomy.....                | 7                  | 0.0                 | 0.9  | ----- | 14.3    | 1.8  | ----- | 14.3     | 2.7  | ----- |
| Hip Replacement/Reconstruction.....        | 20                 | 0.0                 | 3.5  | ----- | 10.0    | 6.6  | ----- | 10.0     | 9.0  | ----- |
| Open Reduction of Hip Fracture.....        | 19                 | 10.5                | 3.6  | ----- | 15.8    | 6.8  | ----- | 26.3     | 9.9  | ----- |
| Prostatectomy.....                         | 51                 | 0.0                 | 1.0  | 1.9   | 0.0     | 2.2  | 3.8   | 3.9      | 3.8  | 3.6   |
| Cholecystectomy.....                       | 34                 | 0.0                 | 2.3  | ----- | 2.9     | 4.7  | ----- | 2.9      | 6.5  | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 0.0      | 2.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# GRATIOT COMMUNITY HOSPITAL

Medicare Provider Number: 230030

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.9 years

Proportion female..... 55.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 60.8 %

Transferred from skilled nursing facility..... 1.1 %

Admitted for elective procedure..... 27.1 %

Admitted for emergency..... 46.0 %

### COMORBIDITIES:

Cancer..... 6.4 %

Chronic cardiovascular disease..... 36.5 %

Chronic liver disease..... 0.5 %

Chronic renal disease..... 6.0 %

Chronic pulmonary disease..... 12.1 %

Cerebrovascular degeneration..... 2.7 %

Diabetes mellitus..... 10.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 65.1%

State ..... 33.9%

Outside State ..... 1.0%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 100

Occupancy Rate ..... 71.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 36.0 %

Case Mix Index (CMI) ..... 1.1756

### STAFFING:

Total Number of Physicians..... 43

Percent of Physicians Board  
Certified Specialists..... 74.4 %

Medical Residents/Interns ..... 0

Registered Nurses..... 112

Licensed Practical Nurses ..... 45

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

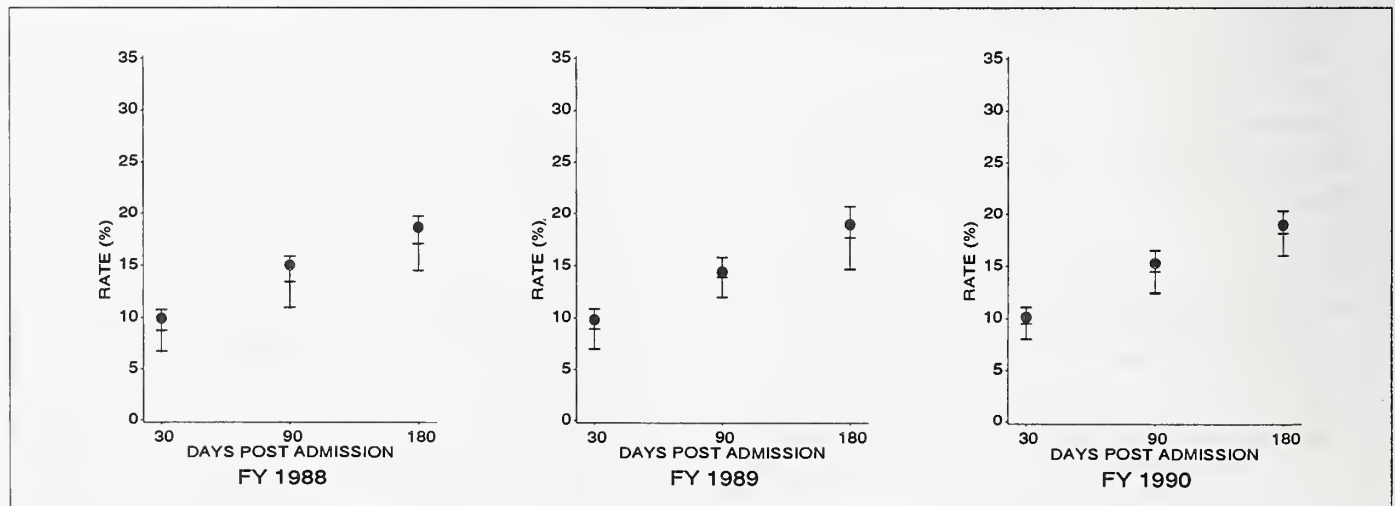
**HACKLEY HOSPITAL**  
1700 CLINTON STREET  
MUSKEGON, MI 49443  
Medicare Provider Number: 230066

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2002               | 10.1                | 9.5  | 0.8  | 15.3    | 14.5 | 1.0  | 19.0     | 18.2 | 1.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 74                 | 20.3                | 26.6 | 7.6  | 29.7    | 29.1 | 8.7  | 33.8     | 31.6 | 7.1  |
| Congestive Heart Failure.....              | 113                | 15.0                | 13.4 | 3.5  | 19.5    | 20.8 | 4.1  | 22.1     | 26.6 | 5.4  |
| Pneumonia/Influenza.....                   | 70                 | 12.9                | 14.9 | 4.6  | 15.7    | 20.7 | 6.3  | 20.0     | 24.3 | 7.5  |
| Chronic Obstructive Pulmonary Disease..... | 26                 | 7.7                 | 11.8 | ---- | 7.7     | 18.8 | ---- | 19.2     | 23.9 | ---- |
| Transient Cerebral Ischemia.....           | 32                 | 0.0                 | 1.7  | ---- | 9.4     | 3.9  | ---- | 15.6     | 6.4  | ---- |
| Stroke.....                                | 89                 | 14.6                | 19.3 | 5.2  | 22.5    | 25.5 | 4.8  | 27.0     | 29.4 | 5.0  |
| Hip Fracture.....                          | 59                 | 5.1                 | 5.6  | 3.0  | 8.5     | 9.6  | 4.1  | 13.6     | 12.6 | 4.4  |
| Sepsis.....                                | 36                 | 22.2                | 26.3 | ---- | 36.1    | 33.9 | ---- | 44.4     | 39.1 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 12                 | 16.7                | 3.9  | ---- | 16.7    | 7.5  | ---- | 16.7     | 10.4 | ---- |
| Carotid Endarterectomy.....                | 15                 | 13.3                | 1.3  | ---- | 13.3    | 2.4  | ---- | 13.3     | 3.6  | ---- |
| Hip Replacement/Reconstruction.....        | 50                 | 2.0                 | 2.9  | ---- | 2.0     | 5.3  | ---- | 8.0      | 7.1  | ---- |
| Open Reduction of Hip Fracture.....        | 23                 | 0.0                 | 5.9  | ---- | 8.7     | 10.0 | ---- | 13.0     | 13.0 | ---- |
| Prostatectomy.....                         | 76                 | 1.3                 | 0.7  | 1.2  | 2.6     | 1.7  | 2.1  | 3.9      | 3.0  | 3.1  |
| Cholecystectomy.....                       | 56                 | 3.6                 | 2.3  | 2.3  | 3.6     | 4.0  | 2.8  | 5.4      | 5.4  | 3.2  |
| Hysterectomy.....                          | 36                 | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





# HACKLEY HOSPITAL

Medicare Provider Number: 230066

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.2 years  
 Proportion female..... 55.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 52.5 %  
 Transferred from skilled nursing facility..... 0.0 %  
 Admitted for elective procedure..... 21.4 %  
 Admitted for emergency..... 48.1 %

### COMORBIDITIES:

Cancer..... 13.7 %  
 Chronic cardiovascular disease..... 31.1 %  
 Chronic liver disease..... 0.9 %  
 Chronic renal disease..... 1.7 %  
 Chronic pulmonary disease..... 13.6 %  
 Cerebrovascular degeneration..... 3.8 %  
 Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 85.7%  
 State ..... 13.0%  
 Outside State ..... 1.3%  
 Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.3 Days  
 State ..... 8.5 Days  
 National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 337  
 Occupancy Rate ..... 47.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges ..... 34.0 %  
 Case Mix Index (CMI) ..... 1.2506

### STAFFING:

Total Number of Physicians..... 168  
 Percent of Physicians Board  
 Certified Specialists..... 88.1 %  
 Medical Residents/Interns ..... 0  
 Registered Nurses..... 214  
 Licensed Practical Nurses ..... 56

### SPECIALTY SERVICES:

Burn Unit ..... No  
 Cardiac Intensive Care ..... No  
 Comprehensive Geriatric ..... Yes  
 Hospice Care ..... No  
 Medical/Surgical Intensive Care ..... Yes  
 Organ/Tissue Transplant ..... No  
 Other Intensive Care ..... No  
 Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
 Rehabilitation..... Yes  
 Psychiatric ..... Yes  
 Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HARBOR BEACH COMMUNITY HOSPITAL

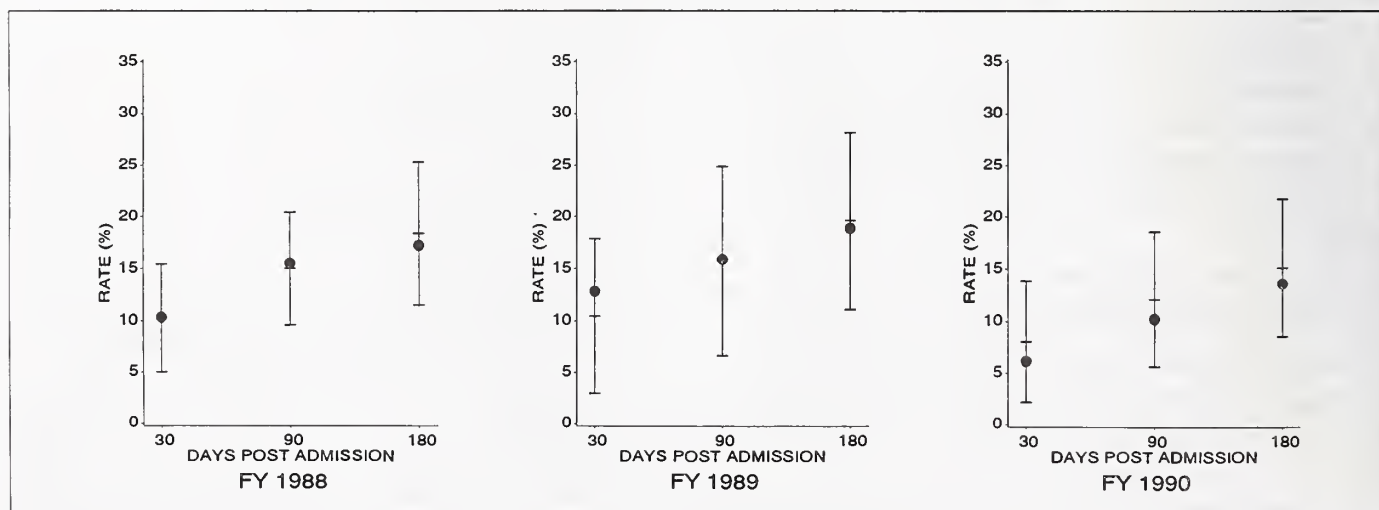
210 S FIRST STREET  
HARBOR BEACH, MI 48441  
Medicare Provider Number: 230213

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 147             | 6.1                 | 8.0  | 2.9  | 10.2    | 12.1 | 3.3  | 13.6     | 15.1 | 3.3  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 8               | 12.5                | 25.4 | ---- | 37.5    | 29.2 | ---- | 37.5     | 32.0 | ---- |
| Congestive Heart Failure.....              | 11              | 9.1                 | 14.2 | ---- | 9.1     | 21.3 | ---- | 18.2     | 26.5 | ---- |
| Pneumonia/Influenza.....                   | 9               | 11.1                | 15.3 | ---- | 11.1    | 21.3 | ---- | 22.2     | 25.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 7               | 14.3                | 13.8 | ---- | 14.3    | 20.5 | ---- | 14.3     | 24.4 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 0               |                     |      |      |         |      |      |          |      |      |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 3               | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.2  | ---- |
| Cholecystectomy.....                       | 5               | 0.0                 | 3.1  | ---- | 0.0     | 5.7  | ---- | 0.0      | 7.4  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HARBOR BEACH COMMUNITY HOSPITAL

Medicare Provider Number: 230213

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.9 years  
Proportion female..... 57.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 96.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 9.5 %  
Admitted for emergency..... 58.5 %

### COMORBIDITIES:

Cancer..... 2.7 %  
Chronic cardiovascular disease..... 31.3 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 1.4 %  
Chronic pulmonary disease..... 6.1 %  
Cerebrovascular degeneration..... 2.7 %  
Diabetes mellitus..... 3.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 89.0%  
State..... 10.6%  
Outside State..... 0.4%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.2 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 67  
Occupancy Rate..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 55.2 %  
Case Mix Index (CMI)..... 1.0322

### STAFFING:

Total Number of Physicians..... 9  
Percent of Physicians Board  
Certified Specialists..... 33.3 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 11  
Licensed Practical Nurses..... 3

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# HARPER GRACE HOSPITAL

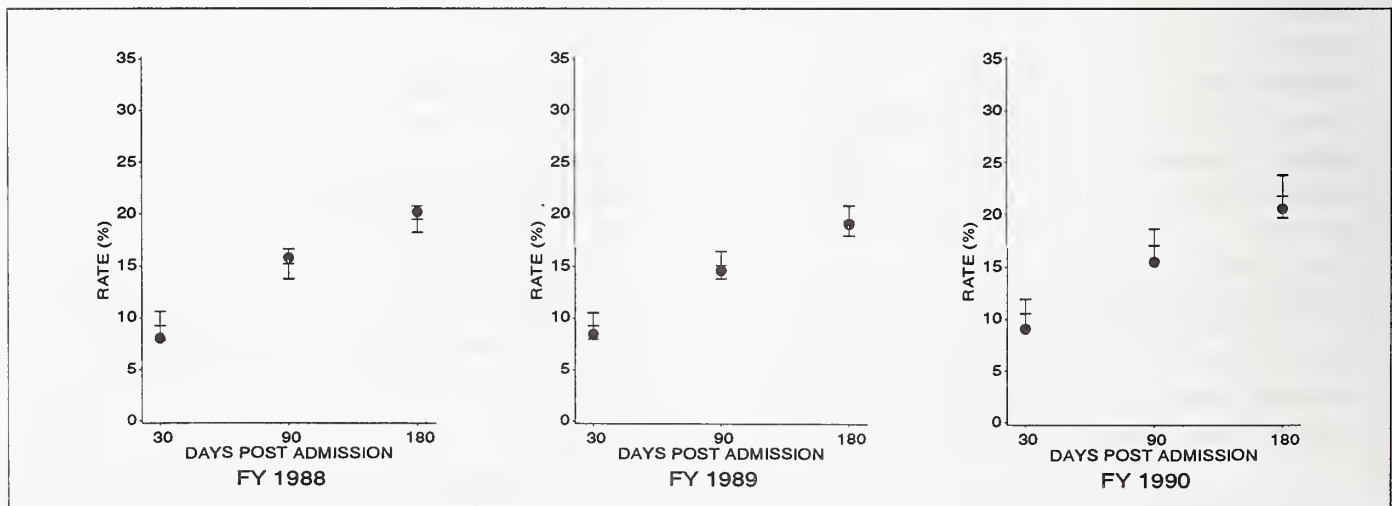
3990 JOHN R STREET  
DETROIT, MI 48201  
Medicare Provider Number: 230104

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3946            | 9.0                 | 10.5 | 0.7   | 15.5    | 17.1 | 0.8   | 20.6     | 21.8 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 60              | 10.0                | 24.1 | 7.9   | 13.3    | 27.6 | 8.1   | 20.0     | 30.3 | 7.9   |
| Congestive Heart Failure.....              | 214             | 12.6                | 15.5 | 4.0   | 22.0    | 25.2 | 3.6   | 30.8     | 31.8 | 3.5   |
| Pneumonia/Influenza.....                   | 48              | 14.6                | 20.1 | ----- | 29.2    | 27.5 | ----- | 37.5     | 31.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 31              | 12.9                | 13.2 | ----- | 22.6    | 21.1 | ----- | 29.0     | 26.7 | ----- |
| Transient Cerebral Ischemia.....           | 77              | 1.3                 | 2.0  | 1.8   | 5.2     | 4.2  | 2.6   | 6.5      | 6.4  | 4.2   |
| Stroke.....                                | 145             | 12.4                | 18.2 | 5.0   | 18.6    | 25.1 | 5.8   | 24.8     | 28.8 | 5.6   |
| Hip Fracture.....                          | 2               | 50.0                | 33.6 | ----- | 100.0   | 56.1 | ----- | 100.0    | 65.4 | ----- |
| Sepsis.....                                | 41              | 22.0                | 24.6 | ----- | 39.0    | 36.7 | ----- | 43.9     | 43.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 74              | 1.4                 | 2.7  | 2.3   | 1.4     | 3.7  | 2.8   | 5.4      | 4.5  | 2.7   |
| Coronary Artery Bypass Graft.....          | 121             | 6.6                 | 5.6  | 3.3   | 9.9     | 8.3  | 3.5   | 12.4     | 9.6  | 3.7   |
| Initial Pacemaker Insertion.....           | 22              | 4.5                 | 3.8  | ----- | 13.6    | 7.7  | ----- | 13.6     | 11.3 | ----- |
| Carotid Endarterectomy.....                | 44              | 2.3                 | 1.6  | ----- | 2.3     | 3.1  | ----- | 2.3      | 4.6  | ----- |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 158             | 0.6                 | 1.3  | 1.1   | 1.9     | 3.1  | 1.8   | 3.2      | 5.2  | 2.7   |
| Cholecystectomy.....                       | 44              | 2.3                 | 4.5  | ----- | 2.3     | 8.9  | ----- | 4.5      | 12.7 | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HARPER GRACE HOSPITAL

Medicare Provider Number: 230104

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 70.6 years  
Proportion female..... 50.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.6 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 25.6 %  
Admitted for emergency..... 65.9 %

### COMORBIDITIES:

Cancer..... 17.9 %  
Chronic cardiovascular disease..... 38.5 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 8.5 %  
Chronic pulmonary disease..... 11.2 %  
Cerebrovascular degeneration..... 3.3 %  
Diabetes mellitus..... 10.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 82.2%  
State ..... 15.8%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 571  
Occupancy Rate ..... 85.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 43.7 %  
Case Mix Index (CMI) ..... 1.4278

### STAFFING:

Total Number of Physicians..... 827  
Percent of Physicians Board  
Certified Specialists ..... 75.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 399  
Licensed Practical Nurses ..... 108

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HAYES GREEN BEACH MEMORIAL HOSPITAL

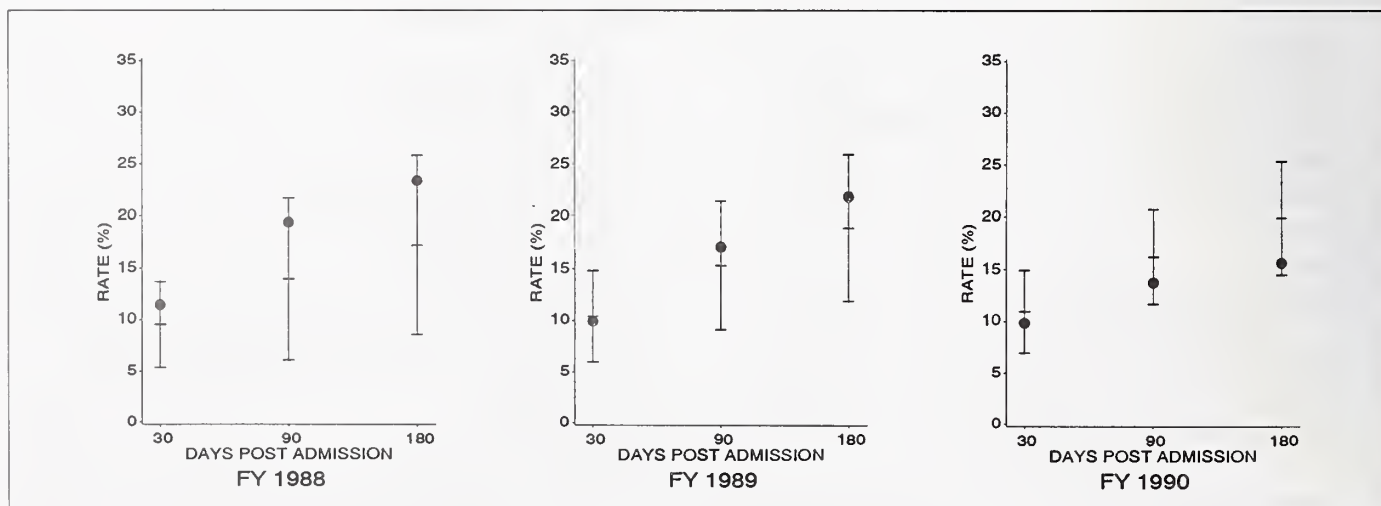
321 HARRIS STREET  
CHARLOTTE, MI 48813  
Medicare Provider Number: 230006

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 307                | 9.8                 | 10.9 | 2.0  | 13.7    | 16.2 | 2.3  | 15.6     | 19.9 | 2.7  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 10                 | 10.0                | 25.5 | ---- | 20.0    | 31.9 | ---- | 30.0     | 35.6 | ---- |
| Congestive Heart Failure.....              | 23                 | 17.4                | 14.8 | ---- | 17.4    | 22.8 | ---- | 17.4     | 28.6 | ---- |
| Pneumonia/Influenza.....                   | 31                 | 16.1                | 17.2 | ---- | 19.4    | 23.3 | ---- | 22.6     | 27.5 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 11                 | 9.1                 | 4.4  | ---- | 9.1     | 7.6  | ---- | 9.1      | 10.9 | ---- |
| Transient Cerebral Ischemia.....           | 2                  | 0.0                 | 0.9  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.9  | ---- |
| Stroke.....                                | 11                 | 18.2                | 20.5 | ---- | 18.2    | 27.4 | ---- | 18.2     | 31.7 | ---- |
| Hip Fracture.....                          | 13                 | 15.4                | 9.3  | ---- | 15.4    | 16.1 | ---- | 15.4     | 19.9 | ---- |
| Sepsis.....                                | 7                  | 14.3                | 33.0 | ---- | 57.1    | 42.3 | ---- | 57.1     | 46.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 1                  | 0.0                 | 4.4  | ---- | 0.0     | 7.8  | ---- | 0.0      | 10.3 | ---- |
| Open Reduction of Hip Fracture.....        | 11                 | 18.2                | 7.6  | ---- | 18.2    | 14.0 | ---- | 18.2     | 18.0 | ---- |
| Prostatectomy.....                         | 8                  | 0.0                 | 1.2  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.7  | ---- |
| Cholecystectomy.....                       | 7                  | 0.0                 | 1.1  | ---- | 0.0     | 1.9  | ---- | 0.0      | 2.4  | ---- |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.2  | ---- | 0.0     | 0.5  | ---- | 0.0      | 1.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HAYES GREEN BEACH MEMORIAL HOSPITAL

Medicare Provider Number: 230006

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.1 years  
Proportion female..... 62.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.9 %  
Transferred from skilled nursing facility..... 0.7 %  
Admitted for elective procedure..... 3.3 %  
Admitted for emergency..... 61.9 %

### COMORBIDITIES:

Cancer..... 3.6 %  
Chronic cardiovascular disease..... 39.4 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 16.3 %  
Cerebrovascular degeneration..... 8.1 %  
Diabetes mellitus..... 8.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 87.0%  
State ..... 12.0%  
Outside State ..... 1.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 46  
Occupancy Rate ..... 39.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 40.1 %  
Case Mix Index (CMI) ..... 1.0859

### STAFFING:

Total Number of Physicians..... 16  
Percent of Physicians Board  
Certified Specialists..... 68.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 24  
Licensed Practical Nurses ..... 10

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# HELEN NEWBERRY JOY HOSPITAL

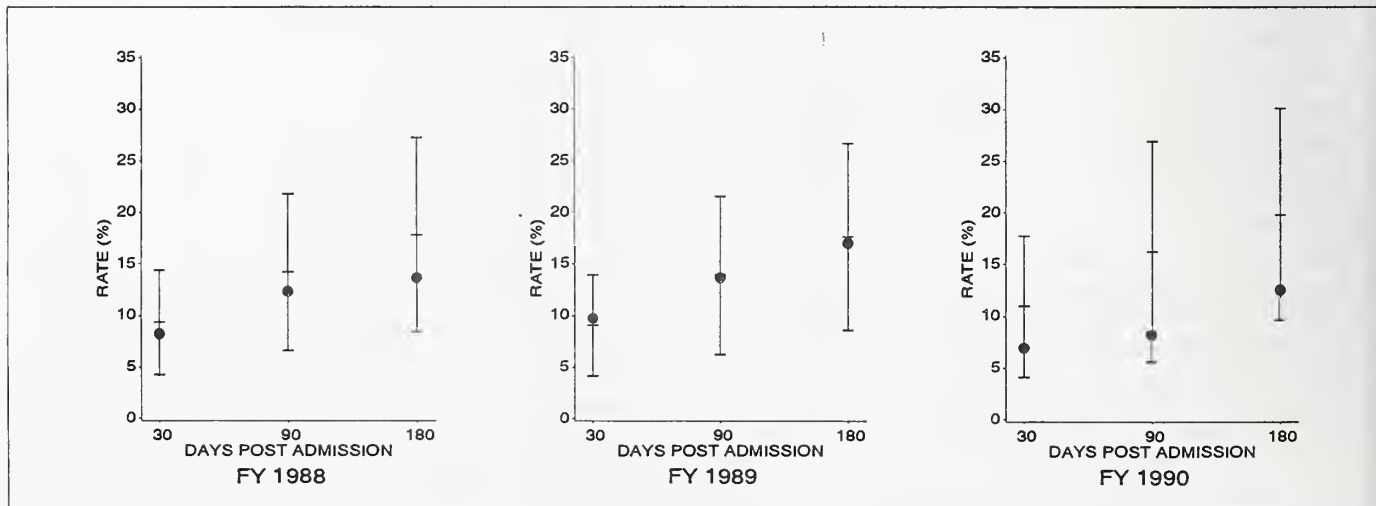
502 W HARRIE STREET  
NEWBERRY, MI 49868  
Medicare Provider Number: 230191

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 160             | 6.9                 | 10.9 | 3.4  | 8.1     | 16.2 | 5.4  | 12.5     | 19.8 | 5.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 4               | 0.0                 | 22.3 | ---- | 0.0     | 25.6 | ---- | 25.0     | 28.7 | ---- |
| Congestive Heart Failure.....              | 17              | 0.0                 | 14.8 | ---- | 11.8    | 23.7 | ---- | 29.4     | 29.1 | ---- |
| Pneumonia/Influenza.....                   | 11              | 9.1                 | 17.4 | ---- | 9.1     | 25.0 | ---- | 9.1      | 29.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 4.0  | ---- | 0.0     | 6.9  | ---- | 0.0      | 9.8  | ---- |
| Transient Cerebral Ischemia.....           | 1               | 0.0                 | 0.8  | ---- | 0.0     | 1.9  | ---- | 0.0      | 3.2  | ---- |
| Stroke.....                                | 15              | 20.0                | 20.9 | ---- | 20.0    | 26.4 | ---- | 26.7     | 30.3 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 2               | 50.0                | 36.4 | ---- | 50.0    | 41.1 | ---- | 50.0     | 44.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0               |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HELEN NEWBERRY JOY HOSPITAL

Medicare Provider Number: 230191

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.3 years  
Proportion female..... 63.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 21.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 1.9 %

### COMORBIDITIES:

Cancer..... 2.5 %  
Chronic cardiovascular disease..... 50.0 %  
Chronic liver disease..... 2.5 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 18.8 %  
Cerebrovascular degeneration..... 6.3 %  
Diabetes mellitus..... 11.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 62.0%  
State ..... 33.1%  
Outside State ..... 4.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 69  
Occupancy Rate ..... 56.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 60.9 %  
Case Mix Index (CMI) ..... 0.9589

### STAFFING:

Total Number of Physicians..... 6  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 0  
Registered Nurses..... 8  
Licensed Practical Nurses ..... 8

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

Not used in calculating mortality rates

# HENRY FORD HOSPITAL

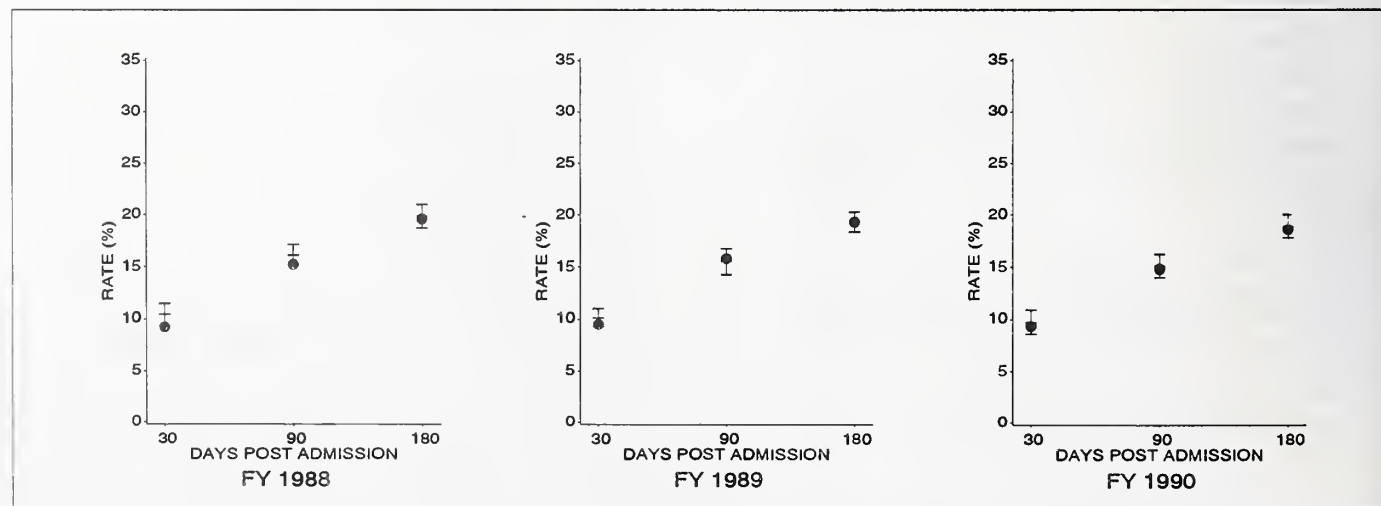
2799 W GRAND BLVD  
DETROIT, MI 48202  
Medicare Provider Number: 230053

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 6668            | 9.3                 | 9.7  | 0.6   | 14.8    | 15.1 | 0.6   | 18.6     | 18.9 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 186             | 16.7                | 23.9 | 4.2   | 21.0    | 27.1 | 3.8   | 25.3     | 29.9 | 4.5   |
| Congestive Heart Failure.....              | 363             | 10.7                | 13.9 | 2.2   | 17.1    | 21.9 | 2.8   | 24.2     | 28.0 | 2.8   |
| Pneumonia/Influenza.....                   | 191             | 18.8                | 16.9 | 4.2   | 28.3    | 23.1 | 5.6   | 30.9     | 27.1 | 4.9   |
| Chronic Obstructive Pulmonary Disease..... | 78              | 11.5                | 11.6 | 3.8   | 20.5    | 19.0 | 6.1   | 25.6     | 24.1 | 5.5   |
| Transient Cerebral Ischemia.....           | 121             | 3.3                 | 1.9  | 1.8   | 3.3     | 4.1  | 2.0   | 5.8      | 6.4  | 2.4   |
| Stroke.....                                | 282             | 18.4                | 17.4 | 2.7   | 26.2    | 24.2 | 4.1   | 29.8     | 27.9 | 4.4   |
| Hip Fracture.....                          | 82              | 8.5                 | 6.8  | 3.3   | 13.4    | 12.0 | 4.4   | 17.1     | 15.6 | 4.4   |
| Sepsis.....                                | 71              | 35.2                | 31.1 | 6.0   | 46.5    | 41.4 | 6.5   | 50.7     | 46.5 | 6.4   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 60              | 3.3                 | 4.5  | 4.3   | 3.3     | 5.8  | 4.9   | 5.0      | 7.0  | 5.8   |
| Coronary Artery Bypass Graft.....          | 132             | 2.3                 | 6.1  | 3.0   | 4.5     | 8.3  | 3.4   | 6.1      | 9.3  | 3.4   |
| Initial Pacemaker Insertion.....           | 43              | 4.7                 | 2.4  | ----- | 4.7     | 4.8  | ----- | 4.7      | 7.0  | ----- |
| Carotid Endarterectomy.....                | 29              | 0.0                 | 1.5  | ----- | 0.0     | 2.8  | ----- | 3.4      | 4.1  | ----- |
| Hip Replacement/Reconstruction.....        | 119             | 0.0                 | 1.9  | 1.8   | 0.8     | 3.7  | 2.7   | 2.5      | 5.1  | 3.0   |
| Open Reduction of Hip Fracture.....        | 43              | 9.3                 | 6.0  | ----- | 14.0    | 11.0 | ----- | 16.3     | 14.6 | ----- |
| Prostatectomy.....                         | 185             | 0.5                 | 0.7  | 0.6   | 0.5     | 1.6  | 1.1   | 0.5      | 2.7  | 1.8   |
| Cholecystectomy.....                       | 82              | 0.0                 | 2.5  | 2.8   | 0.0     | 4.9  | 4.9   | 3.7      | 6.9  | 3.7   |
| Hysterectomy.....                          | 36              | 2.8                 | 1.3  | ----- | 5.6     | 3.0  | ----- | 5.6      | 4.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HENRY FORD HOSPITAL

Medicare Provider Number: 230053

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.3 years

Proportion female..... 48.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 4.5 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 23.4 %

Admitted for emergency..... 74.4 %

### COMORBIDITIES:

Cancer..... 9.8 %

Chronic cardiovascular disease..... 34.4 %

Chronic liver disease..... 1.2 %

Chronic renal disease..... 6.9 %

Chronic pulmonary disease..... 11.3 %

Cerebrovascular degeneration..... 4.8 %

Diabetes mellitus..... 9.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.4%

State ..... 20.6%

Outside State ..... 2.0%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.7 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 806

Occupancy Rate ..... 84.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 30.4 %

Case Mix Index (CMI) ..... 1.3618

### STAFFING:

Total Number of Physicians..... 790

Percent of Physicians Board  
Certified Specialists ..... 75.3 %

Medical Residents/Interns ..... 533

Registered Nurses.....1504

Licensed Practical Nurses ..... 242

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... Yes

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... Yes

Other Intensive Care ..... Yes

Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HERITAGE HOSPITAL

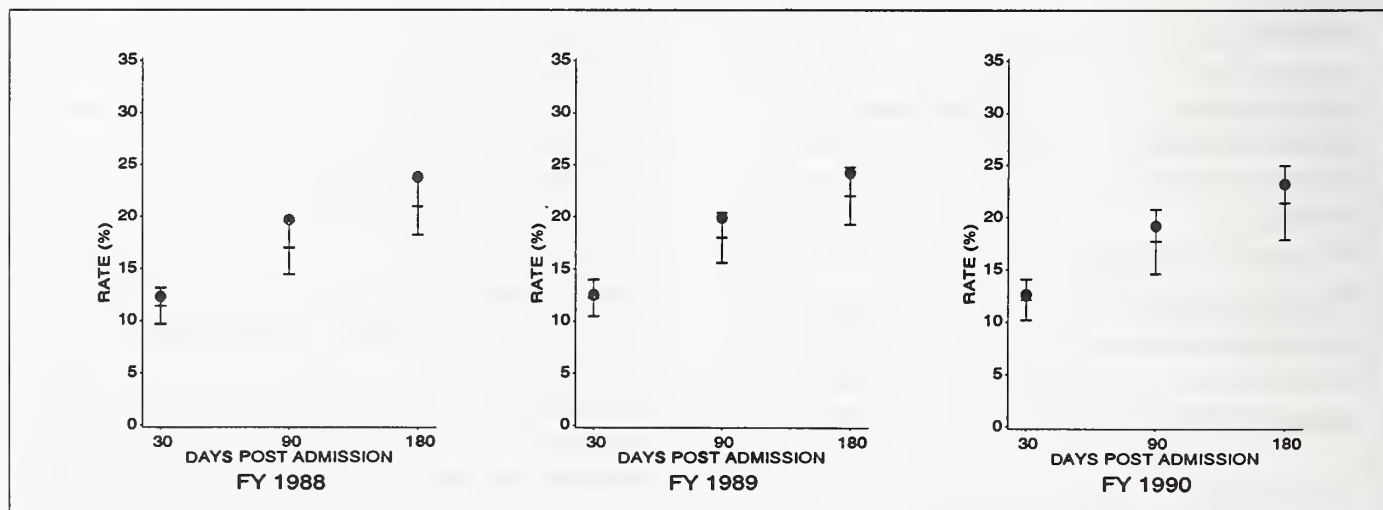
24775 HAIG AVE  
TAYLOR, MI 48180  
Medicare Provider Number: 230270

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1231            | 12.6                | 12.1 | 1.0   | 19.2    | 17.7 | 1.6   | 23.2     | 21.4 | 1.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 47              | 42.6                | 24.7 | ----- | 44.7    | 27.3 | ----- | 48.9     | 29.7 | ----- |
| Congestive Heart Failure.....              | 98              | 14.3                | 15.5 | 3.9   | 26.5    | 24.4 | 4.7   | 31.6     | 30.6 | 4.9   |
| Pneumonia/Influenza.....                   | 57              | 12.3                | 18.8 | 7.4   | 24.6    | 25.1 | 6.9   | 35.1     | 29.1 | 10.2  |
| Chronic Obstructive Pulmonary Disease..... | 22              | 18.2                | 13.2 | ----- | 18.2    | 20.6 | ----- | 18.2     | 25.8 | ----- |
| Transient Cerebral Ischemia.....           | 20              | 0.0                 | 1.7  | ----- | 0.0     | 3.6  | ----- | 0.0      | 5.6  | ----- |
| Stroke.....                                | 47              | 25.5                | 19.4 | ----- | 36.2    | 26.6 | ----- | 38.3     | 30.7 | ----- |
| Hip Fracture.....                          | 39              | 20.5                | 7.9  | ----- | 25.6    | 13.6 | ----- | 30.8     | 17.4 | ----- |
| Sepsis.....                                | 34              | 29.4                | 29.4 | ----- | 38.2    | 39.6 | ----- | 44.1     | 44.4 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 15              | 6.7                 | 5.0  | ----- | 13.3    | 8.7  | ----- | 20.0     | 11.7 | ----- |
| Carotid Endarterectomy.....                | 5               | 20.0                | 2.4  | ----- | 20.0    | 4.1  | ----- | 20.0     | 5.6  | ----- |
| Hip Replacement/Reconstruction.....        | 17              | 17.6                | 4.1  | ----- | 23.5    | 7.3  | ----- | 23.5     | 9.5  | ----- |
| Open Reduction of Hip Fracture.....        | 19              | 15.8                | 9.0  | ----- | 21.1    | 16.3 | ----- | 31.6     | 21.0 | ----- |
| Prostatectomy.....                         | 45              | 4.4                 | 1.0  | ----- | 6.7     | 2.4  | ----- | 8.9      | 4.0  | ----- |
| Cholecystectomy.....                       | 16              | 0.0                 | 4.1  | ----- | 0.0     | 6.1  | ----- | 0.0      | 7.4  | ----- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.1  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HERITAGE HOSPITAL

Medicare Provider Number: 230270

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.4 years  
Proportion female..... 60.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 21.9 %  
Transferred from skilled nursing facility..... 1.1 %  
Admitted for elective procedure..... 9.7 %  
Admitted for emergency..... 67.4 %

### COMORBIDITIES:

Cancer..... 5.8 %  
Chronic cardiovascular disease..... 43.6 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 4.9 %  
Chronic pulmonary disease..... 18.9 %  
Cerebrovascular degeneration..... 5.8 %  
Diabetes mellitus..... 9.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.5%  
State ..... 4.0%  
Outside State ..... 2.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 265  
Occupancy Rate ..... 56.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 46.5 %  
Case Mix Index (CMI) ..... 1.2394

### STAFFING:

Total Number of Physicians..... 154  
Percent of Physicians Board  
Certified Specialists..... 64.3 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 153  
Licensed Practical Nurses ..... 27

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HERRICK MEMORIAL HEALTH CARE CENTER

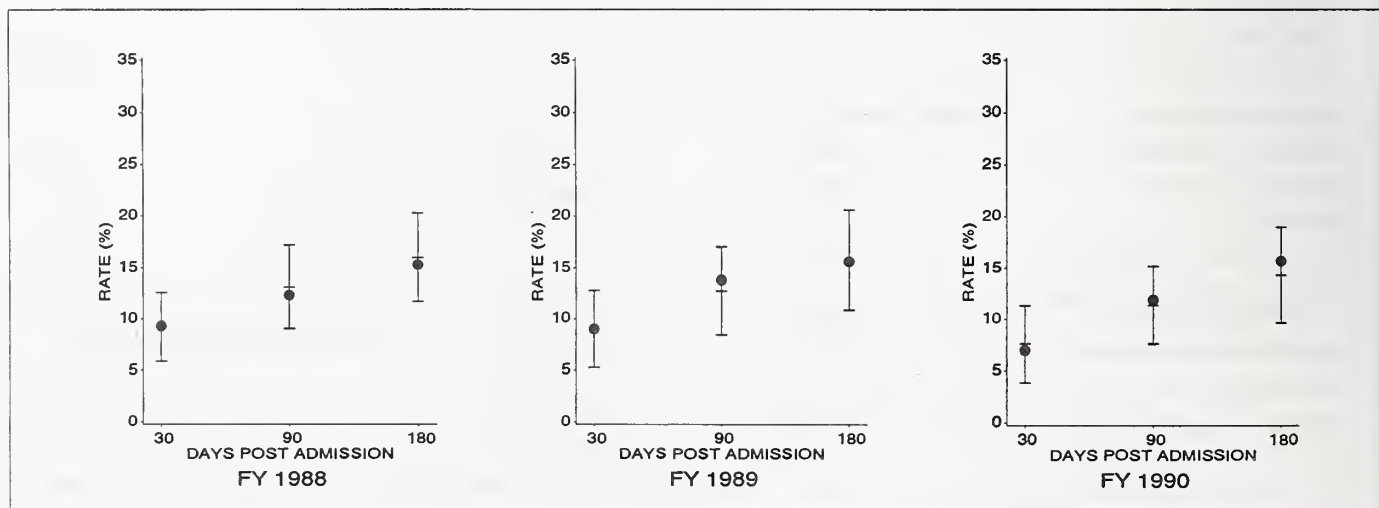
500 E POTTAWATAMIE ST  
TECUMSEH, MI 49286  
Medicare Provider Number: 230120

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 370             | 7.0                 | 7.6  | 1.9   | 11.9    | 11.4 | 1.9   | 15.7     | 14.3 | 2.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 14              | 42.9                | 25.0 | ----- | 42.9    | 27.9 | ----- | 42.9     | 30.6 | ----- |
| Congestive Heart Failure.....              | 21              | 19.0                | 16.5 | ----- | 23.8    | 23.9 | ----- | 38.1     | 29.9 | ----- |
| Pneumonia/Influenza.....                   | 12              | 16.7                | 14.2 | ----- | 25.0    | 20.4 | ----- | 25.0     | 24.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 16.7                | 12.2 | ----- | 16.7    | 19.8 | ----- | 50.0     | 24.9 | ----- |
| Transient Cerebral Ischemia.....           | 9               | 11.1                | 1.8  | ----- | 22.2    | 4.3  | ----- | 22.2     | 6.9  | ----- |
| Stroke.....                                | 15              | 6.7                 | 15.1 | ----- | 6.7     | 19.9 | ----- | 13.3     | 22.5 | ----- |
| Hip Fracture.....                          | 13              | 7.7                 | 7.7  | ----- | 23.1    | 13.3 | ----- | 23.1     | 16.9 | ----- |
| Sepsis.....                                | 1               | 0.0                 | 47.0 | ----- | 0.0     | 51.9 | ----- | 0.0      | 56.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 8               | 0.0                 | 4.2  | ----- | 12.5    | 7.9  | ----- | 12.5     | 10.4 | ----- |
| Open Reduction of Hip Fracture.....        | 8               | 0.0                 | 7.0  | ----- | 12.5    | 12.4 | ----- | 12.5     | 15.9 | ----- |
| Prostatectomy.....                         | 13              | 0.0                 | 1.4  | ----- | 7.7     | 3.6  | ----- | 7.7      | 6.3  | ----- |
| Cholecystectomy.....                       | 6               | 16.7                | 3.0  | ----- | 16.7    | 5.7  | ----- | 16.7     | 7.6  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.0  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HERRICK MEMORIAL HEALTH CARE CENTER

Medicare Provider Number: 230120

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.3 years  
Proportion female..... 56.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 20.2 %  
Admitted for emergency..... 58.8 %

### COMORBIDITIES:

Cancer..... 5.7 %  
Chronic cardiovascular disease..... 31.0 %  
Chronic liver disease..... 0.3 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 12.1 %  
Cerebrovascular degeneration..... 2.7 %  
Diabetes mellitus..... 7.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 86.8%  
State..... 8.9%  
Outside State..... 4.3%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.9 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 106  
Occupancy Rate..... 46.0 %  
Ownership/Control..... Local Government  
Medicare Discharges..... 29.4 %  
Case Mix Index (CMI)..... 1.0217

### STAFFING:

Total Number of Physicians..... 36  
Percent of Physicians Board  
Certified Specialists..... 38.9 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 48  
Licensed Practical Nurses..... 15

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HILLS AND DALE GENERAL HOSPITAL

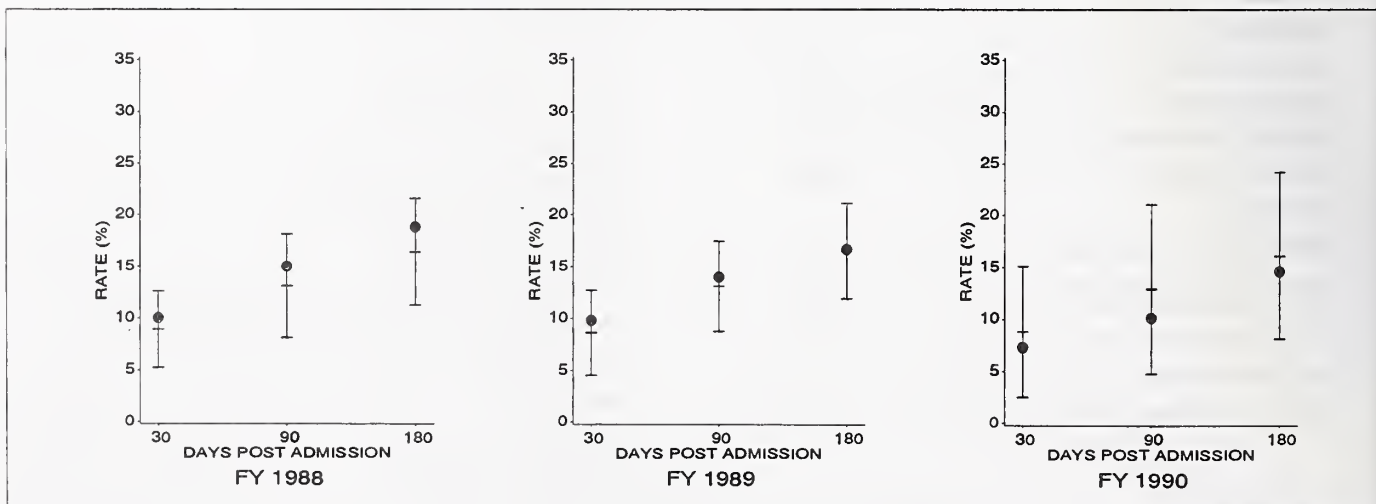
4675 HILL ST  
CASS CITY, MI 48726  
Medicare Provider Number: 230188

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 247             | 7.3                 | 8.8  | 3.2   | 10.1    | 12.9 | 4.1   | 14.6     | 16.1 | 4.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 4               | 50.0                | 32.8 | ----- | 50.0    | 35.0 | ----- | 50.0     | 37.8 | ----- |
| Congestive Heart Failure.....              | 15              | 20.0                | 15.5 | ----- | 20.0    | 22.5 | ----- | 20.0     | 27.8 | ----- |
| Pneumonia/Influenza.....                   | 62              | 6.5                 | 10.8 | 7.7   | 9.7     | 14.8 | 7.5   | 17.7     | 18.0 | 6.5   |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 3.4  | ----- | 0.0     | 6.6  | ----- | 0.0      | 9.6  | ----- |
| Transient Cerebral Ischemia.....           | 3               | 33.3                | 3.3  | ----- | 33.3    | 7.3  | ----- | 66.7     | 11.6 | ----- |
| Stroke.....                                | 5               | 0.0                 | 10.8 | ----- | 0.0     | 15.5 | ----- | 0.0      | 18.5 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 4               | 25.0                | 30.4 | ----- | 25.0    | 36.2 | ----- | 25.0     | 41.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 3.4  | ----- | 0.0     | 8.7  | ----- | 0.0      | 14.6 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 3               | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 0.0      | 3.4  | ----- |
| Cholecystectomy.....                       | 5               | 0.0                 | 1.5  | ----- | 0.0     | 2.6  | ----- | 0.0      | 3.4  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HILLS AND DALE GENERAL HOSPITAL

Medicare Provider Number: 230188

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.4 years  
Proportion female..... 60.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 78.9 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 6.1 %  
Admitted for emergency..... 20.6 %

### COMORBIDITIES:

Cancer..... 2.4 %  
Chronic cardiovascular disease..... 33.2 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 16.6 %  
Cerebrovascular degeneration..... 3.6 %  
Diabetes mellitus..... 18.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 70.0%  
State ..... 28.4%  
Outside State ..... 1.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 65  
Occupancy Rate ..... 23.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.1 %  
Case Mix Index (CMI) ..... 1.1048

### STAFFING:

Total Number of Physicians..... 6  
Percent of Physicians Board  
Certified Specialists ..... 16.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 14  
Licensed Practical Nurses ..... 11

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HILLSDALE COMMUNITY HEALTH CENTER

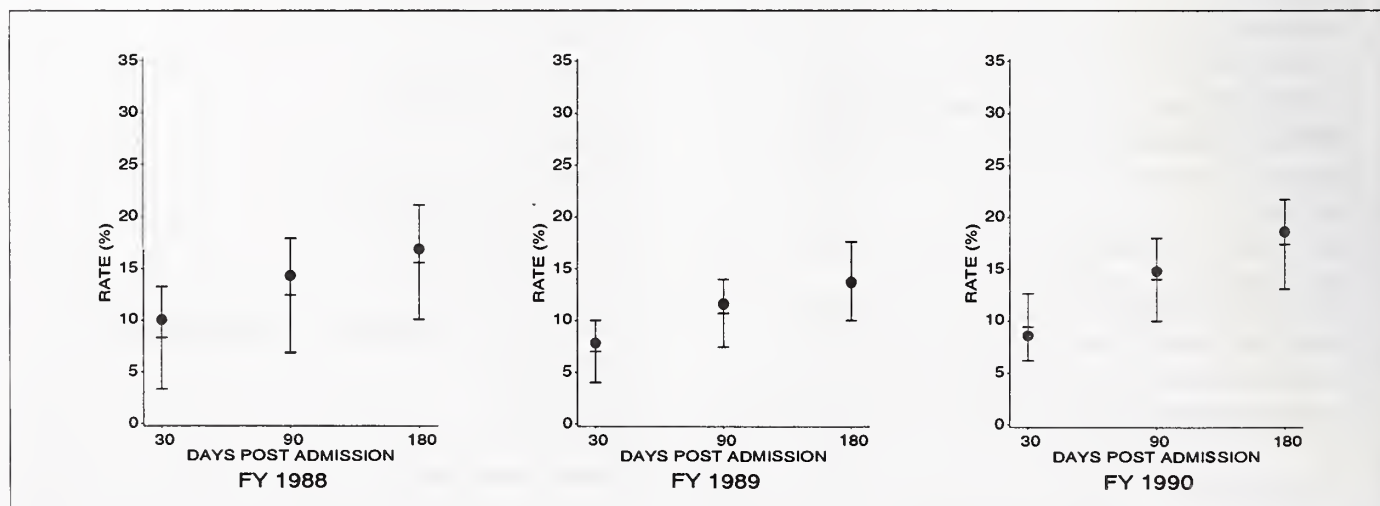
168 S HOWELL STREET  
HILLSDALE, MI 49242  
Medicare Provider Number: 230037

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 467             | 8.6                 | 9.4  | 1.6  | 14.8    | 14.0 | 2.0  | 18.6     | 17.4 | 2.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 23              | 8.7                 | 29.5 | ---- | 17.4    | 32.7 | ---- | 26.1     | 35.5 | ---- |
| Congestive Heart Failure.....              | 40              | 12.5                | 15.8 | ---- | 32.5    | 24.7 | ---- | 40.0     | 30.9 | ---- |
| Pneumonia/Influenza.....                   | 34              | 14.7                | 11.4 | ---- | 17.6    | 15.9 | ---- | 23.5     | 19.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 14              | 14.3                | 5.7  | ---- | 28.6    | 10.3 | ---- | 28.6     | 13.8 | ---- |
| Transient Cerebral Ischemia.....           | 8               | 0.0                 | 1.1  | ---- | 0.0     | 2.5  | ---- | 0.0      | 4.2  | ---- |
| Stroke.....                                | 20              | 10.0                | 14.0 | ---- | 15.0    | 18.7 | ---- | 15.0     | 21.8 | ---- |
| Hip Fracture.....                          | 4               | 0.0                 | 4.5  | ---- | 0.0     | 8.6  | ---- | 25.0     | 11.9 | ---- |
| Sepsis.....                                | 9               | 11.1                | 27.1 | ---- | 22.2    | 34.3 | ---- | 33.3     | 39.5 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 4               | 0.0                 | 4.1  | ---- | 0.0     | 8.0  | ---- | 25.0     | 11.4 | ---- |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 17              | 0.0                 | 1.5  | ---- | 0.0     | 3.0  | ---- | 0.0      | 4.3  | ---- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.3  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HILLSDALE COMMUNITY HEALTH CENTER

Medicare Provider Number: 230037

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.2 years  
Proportion female..... 63.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 86.3 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 6.8 %  
Admitted for emergency..... 64.7 %

### COMORBIDITIES:

Cancer..... 4.5 %  
Chronic cardiovascular disease..... 32.3 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 1.7 %  
Chronic pulmonary disease..... 10.9 %  
Cerebrovascular degeneration..... 2.8 %  
Diabetes mellitus..... 4.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 88.5%  
State ..... 8.5%  
Outside State ..... 3.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 68  
Occupancy Rate ..... 39.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 33.8 %  
Case Mix Index (CMI) ..... 1.0963

### STAFFING:

Total Number of Physicians..... 24  
Percent of Physicians Board  
Certified Specialists..... 50.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 51  
Licensed Practical Nurses ..... 38

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HOLLAND COMMUNITY HOSPITAL

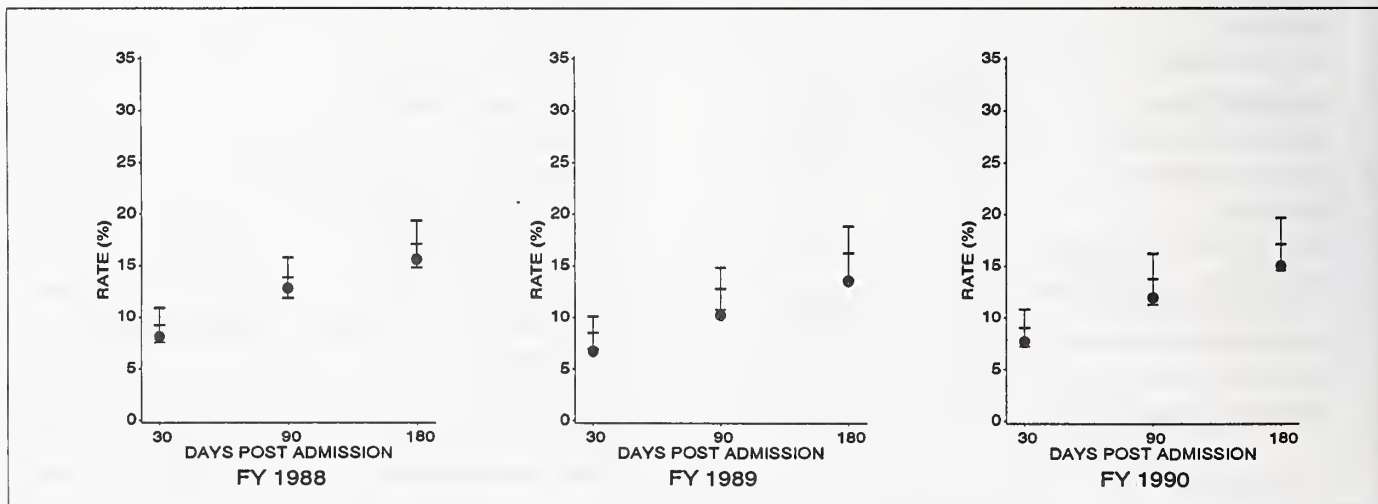
602 MICHIGAN AVE  
HOLLAND, MI 49423  
Medicare Provider Number: 230072

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1654            | 7.7                 | 9.0  | 0.9   | 11.9    | 13.7 | 1.2   | 15.0     | 17.1 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 45              | 17.8                | 23.3 | ----- | 22.2    | 26.0 | ----- | 26.7     | 28.4 | ----- |
| Congestive Heart Failure.....              | 102             | 14.7                | 14.6 | 3.6   | 22.5    | 22.9 | 4.3   | 26.5     | 29.2 | 5.3   |
| Pneumonia/Influenza.....                   | 89              | 10.1                | 17.0 | 7.6   | 19.1    | 23.1 | 9.8   | 22.5     | 27.3 | 9.2   |
| Chronic Obstructive Pulmonary Disease..... | 12              | 16.7                | 11.3 | ----- | 25.0    | 18.6 | ----- | 25.0     | 23.1 | ----- |
| Transient Cerebral Ischemia.....           | 18              | 5.6                 | 2.0  | ----- | 11.1    | 4.3  | ----- | 22.2     | 7.0  | ----- |
| Stroke.....                                | 75              | 16.0                | 21.9 | 6.8   | 20.0    | 28.9 | 8.6   | 21.3     | 32.8 | 9.2   |
| Hip Fracture.....                          | 62              | 4.8                 | 7.8  | 3.6   | 6.5     | 13.5 | 4.9   | 9.7      | 17.1 | 5.5   |
| Sepsis.....                                | 31              | 22.6                | 29.7 | ----- | 25.8    | 38.3 | ----- | 25.8     | 43.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 2.3  | ----- | 0.0     | 4.5  | ----- | 0.0      | 6.4  | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 1.3  | ----- | 0.0     | 2.2  | ----- | 0.0      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 48              | 2.1                 | 2.6  | ----- | 4.2     | 5.0  | ----- | 6.3      | 6.8  | ----- |
| Open Reduction of Hip Fracture.....        | 37              | 2.7                 | 7.0  | ----- | 2.7     | 12.3 | ----- | 5.4      | 16.0 | ----- |
| Prostatectomy.....                         | 111             | 0.0                 | 1.3  | 1.4   | 0.9     | 3.0  | 1.9   | 1.8      | 5.0  | 2.4   |
| Cholecystectomy.....                       | 38              | 5.3                 | 3.1  | ----- | 10.5    | 5.7  | ----- | 13.2     | 7.4  | ----- |
| Hysterectomy.....                          | 30              | 0.0                 | 0.3  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HOLLAND COMMUNITY HOSPITAL

Medicare Provider Number: 230072

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.5 years |
| Proportion female.....        | 57.0 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 35.5 % |
| Transferred from skilled nursing facility..... | 6.0 %  |
| Admitted for elective procedure.....           | 20.9 % |
| Admitted for emergency.....                    | 52.5 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.6 %  |
| Chronic cardiovascular disease..... | 41.9 % |
| Chronic liver disease.....          | 0.2 %  |
| Chronic renal disease.....          | 1.7 %  |
| Chronic pulmonary disease.....      | 13.1 % |
| Cerebrovascular degeneration.....   | 3.9 %  |
| Diabetes mellitus.....              | 9.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 68.4%  |
| State .....         | 27.6%  |
| Outside State ..... | 4.0%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.9 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 177                 |
| Occupancy Rate .....       | 59.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 32.5 %              |
| Case Mix Index (CMI) ..... | 1.1996              |

### STAFFING:

|                                                            |                 |
|------------------------------------------------------------|-----------------|
| Total Number of Physicians.....                            | 106             |
| Percent of Physicians Board<br>Certified Specialists ..... | (Not Available) |
| Medical Residents/Interns .....                            | 0               |
| Registered Nurses .....                                    | 182             |
| Licensed Practical Nurses .....                            | 52              |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# HOLY CROSS HOSPITAL

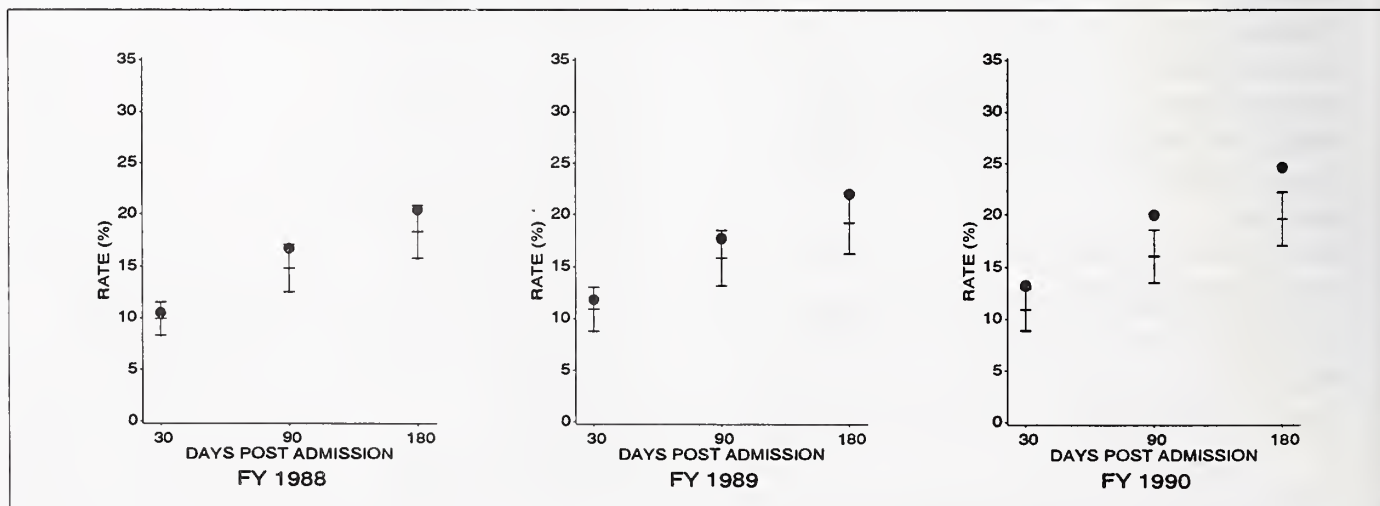
4777 E OUTER DRIVE  
DETROIT, MI 48234  
Medicare Provider Number: 230065

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1485            | 13.2                | 10.9 | 1.0   | 20.0    | 16.0 | 1.3   | 24.6     | 19.6 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 48              | 39.6                | 26.6 | ----- | 45.8    | 29.2 | ----- | 47.9     | 31.5 | ----- |
| Congestive Heart Failure.....              | 133             | 12.8                | 13.8 | 3.1   | 24.8    | 22.0 | 4.3   | 35.3     | 28.2 | 6.0   |
| Pneumonia/Influenza.....                   | 82              | 22.0                | 17.3 | 4.5   | 35.4    | 23.5 | 6.3   | 41.5     | 27.7 | 7.4   |
| Chronic Obstructive Pulmonary Disease..... | 14              | 7.1                 | 13.9 | ----- | 7.1     | 20.4 | ----- | 14.3     | 25.5 | ----- |
| Transient Cerebral Ischemia.....           | 20              | 0.0                 | 2.2  | ----- | 5.0     | 4.5  | ----- | 20.0     | 6.7  | ----- |
| Stroke.....                                | 81              | 28.4                | 19.0 | 6.6   | 35.8    | 26.9 | 7.0   | 42.0     | 31.0 | 7.8   |
| Hip Fracture.....                          | 34              | 5.9                 | 6.7  | ----- | 11.8    | 11.5 | ----- | 11.8     | 14.8 | ----- |
| Sepsis.....                                | 6               | 33.3                | 33.3 | ----- | 66.7    | 44.6 | ----- | 66.7     | 50.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 10              | 0.0                 | 2.9  | ----- | 10.0    | 5.7  | ----- | 10.0     | 8.7  | ----- |
| Carotid Endarterectomy.....                | 12              | 0.0                 | 1.0  | ----- | 0.0     | 2.0  | ----- | 0.0      | 3.0  | ----- |
| Hip Replacement/Reconstruction.....        | 16              | 6.3                 | 5.5  | ----- | 6.3     | 10.4 | ----- | 6.3      | 13.9 | ----- |
| Open Reduction of Hip Fracture.....        | 20              | 0.0                 | 5.7  | ----- | 10.0    | 9.7  | ----- | 10.0     | 12.4 | ----- |
| Prostatectomy.....                         | 63              | 0.0                 | 1.4  | 1.9   | 1.6     | 3.2  | 2.6   | 3.2      | 5.3  | 3.3   |
| Cholecystectomy.....                       | 27              | 7.4                 | 2.2  | ----- | 7.4     | 3.7  | ----- | 7.4      | 4.8  | ----- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.1  | ----- | 10.0    | 0.3  | ----- | 10.0     | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HOLY CROSS HOSPITAL

Medicare Provider Number: 230065

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.8 years |
| Proportion female.....        | 53.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 26.5 % |
| Transferred from skilled nursing facility..... | 0.1 %  |
| Admitted for elective procedure.....           | 32.3 % |
| Admitted for emergency.....                    | 63.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.3 %  |
| Chronic cardiovascular disease..... | 38.2 % |
| Chronic liver disease.....          | 0.9 %  |
| Chronic renal disease.....          | 3.2 %  |
| Chronic pulmonary disease.....      | 11.4 % |
| Cerebrovascular degeneration.....   | 3.8 %  |
| Diabetes mellitus.....              | 8.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 69.9%  |
| State .....         | 28.9%  |
| Outside State ..... | 1.2%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |           |
|----------------|-----------|
| Hospital ..... | 11.5 Days |
| State .....    | 8.5 Days  |
| National ..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 195                 |
| Occupancy Rate .....       | 66.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 57.3 %              |
| Case Mix Index (CMI) ..... | 1.3111              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 170    |
| Percent of Physicians Board<br>Certified Specialists ..... | 55.3 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 143    |
| Licensed Practical Nurses .....                            | 31     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric.....          | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# HURLEY MEDICAL CENTER

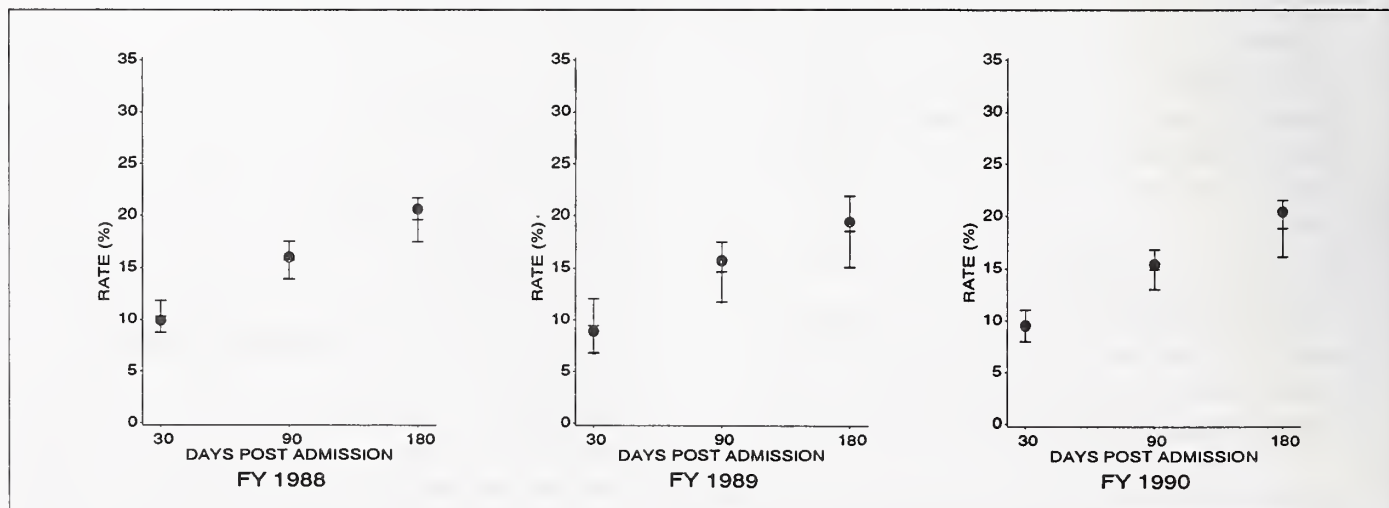
1 HURLEY PLAZA  
FLINT, MI 48502  
Medicare Provider Number: 230132

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1666            | 9.5                 | 9.5  | 0.8   | 15.4    | 14.9 | 0.9   | 20.4     | 18.8 | 1.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 33              | 15.2                | 24.5 | ----- | 21.2    | 27.3 | ----- | 30.3     | 29.7 | ----- |
| Congestive Heart Failure.....              | 115             | 9.6                 | 12.3 | 4.6   | 15.7    | 19.9 | 5.8   | 24.3     | 25.7 | 5.9   |
| Pneumonia/Influenza.....                   | 48              | 14.6                | 15.4 | ----- | 16.7    | 21.2 | ----- | 27.1     | 24.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 9.1                 | 13.1 | ----- | 18.2    | 22.5 | ----- | 18.2     | 28.5 | ----- |
| Transient Cerebral Ischemia.....           | 10              | 0.0                 | 1.3  | ----- | 10.0    | 2.9  | ----- | 10.0     | 4.8  | ----- |
| Stroke.....                                | 61              | 13.1                | 15.2 | 4.7   | 26.2    | 21.3 | 5.6   | 27.9     | 24.7 | 7.5   |
| Hip Fracture.....                          | 19              | 10.5                | 8.0  | ----- | 10.5    | 14.0 | ----- | 21.1     | 18.1 | ----- |
| Sepsis.....                                | 33              | 33.3                | 20.5 | ----- | 36.4    | 27.3 | ----- | 39.4     | 31.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 7.7                 | 2.4  | ----- | 7.7     | 5.0  | ----- | 7.7      | 7.4  | ----- |
| Carotid Endarterectomy.....                | 14              | 0.0                 | 1.6  | ----- | 7.1     | 3.1  | ----- | 14.3     | 4.5  | ----- |
| Hip Replacement/Reconstruction.....        | 10              | 0.0                 | 3.7  | ----- | 0.0     | 6.8  | ----- | 10.0     | 9.2  | ----- |
| Open Reduction of Hip Fracture.....        | 12              | 8.3                 | 7.1  | ----- | 8.3     | 12.7 | ----- | 16.7     | 16.8 | ----- |
| Prostatectomy.....                         | 22              | 4.5                 | 1.0  | ----- | 4.5     | 2.6  | ----- | 4.5      | 4.5  | ----- |
| Cholecystectomy.....                       | 21              | 4.8                 | 4.8  | ----- | 14.3    | 9.4  | ----- | 14.3     | 12.8 | ----- |
| Hysterectomy.....                          | 25              | 4.0                 | 0.4  | ----- | 8.0     | 1.0  | ----- | 8.0      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HURLEY MEDICAL CENTER

Medicare Provider Number: 230132

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 68.4 years  
Proportion female..... 50.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 36.3 %  
Transferred from skilled nursing facility..... 1.4 %  
Admitted for elective procedure..... 14.8 %  
Admitted for emergency..... 12.7 %

### COMORBIDITIES:

Cancer..... 10.0 %  
Chronic cardiovascular disease..... 37.8 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 14.6 %  
Chronic pulmonary disease..... 10.6 %  
Cerebrovascular degeneration..... 6.0 %  
Diabetes mellitus..... 13.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.9%  
State ..... 11.5%  
Outside State ..... 1.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 540  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 17.8 %  
Case Mix Index (CMI) ..... 1.3398

### STAFFING:

Total Number of Physicians..... 240  
Percent of Physicians Board  
Certified Specialists ..... 60.8 %  
Medical Residents/Interns ..... 72  
Registered Nurses..... 763  
Licensed Practical Nurses..... 143

### SPECIALTY SERVICES:

Burn Unit ..... Yes  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# HURON MEMORIAL HOSPITAL

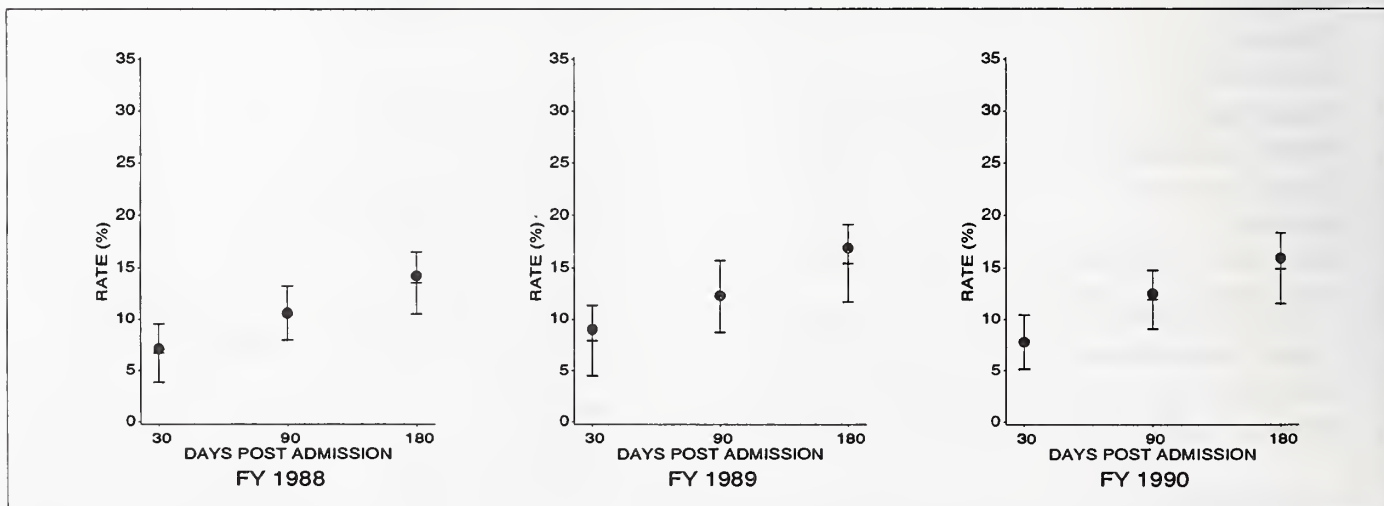
1100 SOUTH VAN DYKE ROAD  
BAD AXE, MI 48413  
Medicare Provider Number: 230118

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 591             | 7.8                 | 7.8  | 1.3   | 12.5    | 11.9 | 1.4   | 15.9     | 14.9 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 9               | 55.6                | 21.7 | ----- | 55.6    | 26.3 | ----- | 55.6     | 29.7 | ----- |
| Congestive Heart Failure.....              | 42              | 11.9                | 16.0 | ----- | 26.2    | 24.8 | ----- | 28.6     | 30.8 | ----- |
| Pneumonia/Influenza.....                   | 35              | 5.7                 | 14.8 | ----- | 14.3    | 19.9 | ----- | 25.7     | 23.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 8.7  | ----- | 16.7    | 13.1 | ----- | 16.7     | 17.0 | ----- |
| Transient Cerebral Ischemia.....           | 12              | 16.7                | 1.9  | ----- | 16.7    | 4.2  | ----- | 33.3     | 7.0  | ----- |
| Stroke.....                                | 22              | 31.8                | 17.9 | ----- | 31.8    | 23.8 | ----- | 40.9     | 27.3 | ----- |
| Hip Fracture.....                          | 52              | 1.9                 | 5.1  | 4.1   | 9.6     | 9.1  | 4.6   | 15.4     | 12.2 | 5.5   |
| Sepsis.....                                | 3               | 0.0                 | 33.7 | ----- | 0.0     | 38.7 | ----- | 0.0      | 43.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 48              | 2.1                 | 2.8  | ----- | 2.1     | 5.2  | ----- | 4.2      | 7.3  | ----- |
| Open Reduction of Hip Fracture.....        | 22              | 0.0                 | 3.7  | ----- | 9.1     | 7.0  | ----- | 18.2     | 9.6  | ----- |
| Prostatectomy.....                         | 27              | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 3.7      | 3.2  | ----- |
| Cholecystectomy.....                       | 20              | 0.0                 | 1.1  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.0  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.7  | ----- | 0.0     | 1.5  | ----- | 0.0      | 2.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# HURON MEMORIAL HOSPITAL

Medicare Provider Number: 230118

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.4 years  
Proportion female..... 52.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 53.4 %  
Transferred from skilled nursing facility..... 0.7 %  
Admitted for elective procedure..... 28.9 %  
Admitted for emergency..... 30.6 %

### COMORBIDITIES:

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 29.7 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 1.5 %  
Chronic pulmonary disease..... 10.0 %  
Cerebrovascular degeneration..... 1.9 %  
Diabetes mellitus..... 9.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 78.1%  
State..... 20.1%  
Outside State..... 1.8%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 6.7 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 93  
Occupancy Rate..... 29.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 39.9 %  
Case Mix Index (CMI)..... 1.2297

### STAFFING:

Total Number of Physicians..... 19  
Percent of Physicians Board  
Certified Specialists..... 78.9 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 39  
Licensed Practical Nurses..... 32

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# HURON VALLEY HOSPITAL

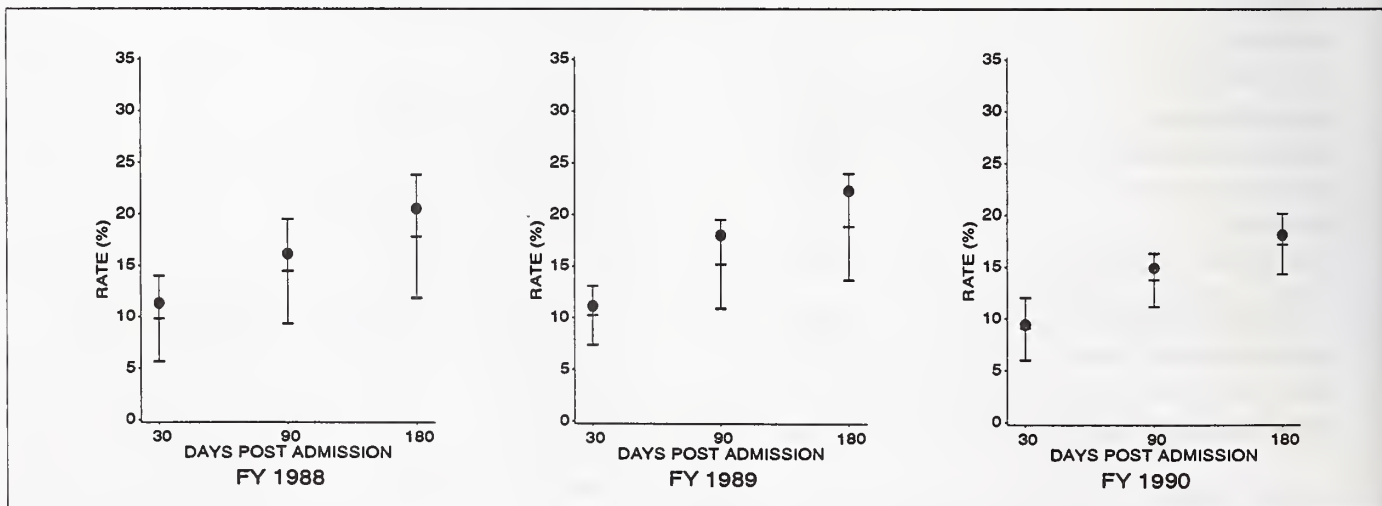
1601 EAST COMMERCE ROAD  
MILFORD, MI 48042  
Medicare Provider Number: 230277

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 994                | 9.4                 | 9.0  | 1.5   | 14.9    | 13.7 | 1.3   | 18.1     | 17.2 | 1.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 32                 | 31.3                | 21.5 | ----- | 31.3    | 24.6 | ----- | 31.3     | 27.1 | ----- |
| Congestive Heart Failure.....              | 74                 | 12.2                | 13.6 | 4.3   | 23.0    | 22.2 | 5.2   | 28.4     | 28.6 | 5.4   |
| Pneumonia/Influenza.....                   | 47                 | 12.8                | 15.9 | ----- | 19.1    | 21.9 | ----- | 23.4     | 25.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 14                 | 7.1                 | 9.4  | ----- | 7.1     | 16.0 | ----- | 14.3     | 20.9 | ----- |
| Transient Cerebral Ischemia.....           | 14                 | 0.0                 | 1.0  | ----- | 7.1     | 2.3  | ----- | 7.1      | 3.9  | ----- |
| Stroke.....                                | 47                 | 14.9                | 18.3 | ----- | 23.4    | 25.0 | ----- | 23.4     | 28.7 | ----- |
| Hip Fracture.....                          | 34                 | 5.9                 | 6.5  | ----- | 20.6    | 11.8 | ----- | 26.5     | 15.6 | ----- |
| Sepsis.....                                | 10                 | 20.0                | 27.6 | ----- | 40.0    | 37.8 | ----- | 40.0     | 43.5 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 12                 | 0.0                 | 2.2  | ----- | 0.0     | 4.5  | ----- | 0.0      | 6.9  | ----- |
| Carotid Endarterectomy.....                | 1                  | 0.0                 | 0.5  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.6  | ----- |
| Hip Replacement/Reconstruction.....        | 23                 | 0.0                 | 4.9  | ----- | 13.0    | 9.5  | ----- | 21.7     | 12.9 | ----- |
| Open Reduction of Hip Fracture.....        | 15                 | 6.7                 | 5.5  | ----- | 20.0    | 9.7  | ----- | 20.0     | 12.9 | ----- |
| Prostatectomy.....                         | 25                 | 0.0                 | 1.0  | ----- | 0.0     | 2.4  | ----- | 0.0      | 4.0  | ----- |
| Cholecystectomy.....                       | 25                 | 0.0                 | 1.8  | ----- | 0.0     | 3.1  | ----- | 4.0      | 4.3  | ----- |
| Hysterectomy.....                          | 9                  | 0.0                 | 0.3  | ----- | 0.0     | 0.6  | ----- | 0.0      | 1.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# HURON VALLEY HOSPITAL

Medicare Provider Number: 230277

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.0 years |
| Proportion female.....        | 61.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 97.5 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 10.3 % |
| Admitted for emergency.....                    | 78.6 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.7 %  |
| Chronic cardiovascular disease..... | 45.7 % |
| Chronic liver disease.....          | 0.8 %  |
| Chronic renal disease.....          | 2.6 %  |
| Chronic pulmonary disease.....      | 20.1 % |
| Cerebrovascular degeneration.....   | 3.6 %  |
| Diabetes mellitus.....              | 8.8 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 84.0%  |
| State .....         | 12.5%  |
| Outside State ..... | 3.5%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.8 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 130                 |
| Occupancy Rate .....       | 57.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 28.9 %              |
| Case Mix Index (CMI) ..... | 1.2277              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 234    |
| Percent of Physicians Board<br>Certified Specialists ..... | 75.2 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 155    |
| Licensed Practical Nurses .....                            | 0      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

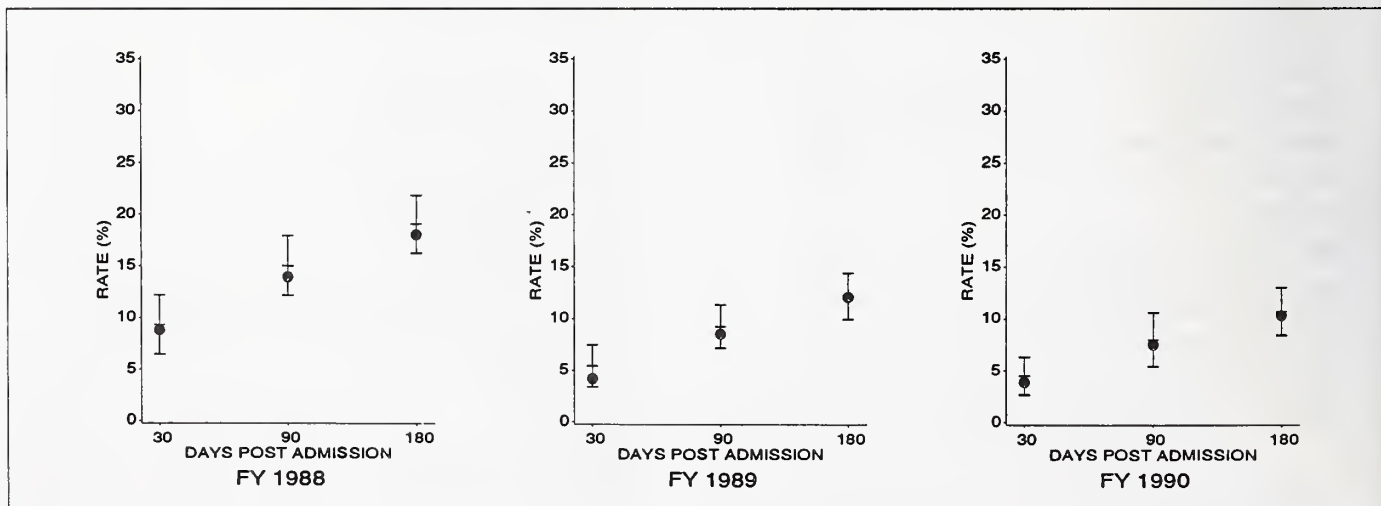
**HUTZEL HOSPITAL**  
4707 ST ANTOINE BLVD  
DETROIT, MI 48201  
Medicare Provider Number: 230076

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 974                | 3.9                 | 4.5  | 0.9  | 7.5     | 8.0  | 1.3  | 10.3     | 10.7 | 1.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 6                  | 16.7                | 18.2 | ---- | 16.7    | 20.4 | ---- | 33.3     | 22.6 | ---- |
| Congestive Heart Failure.....              | 33                 | 3.0                 | 12.6 | ---- | 15.2    | 20.8 | ---- | 18.2     | 26.4 | ---- |
| Pneumonia/Influenza.....                   | 8                  | 0.0                 | 9.6  | ---- | 0.0     | 13.3 | ---- | 0.0      | 16.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7                  | 0.0                 | 14.5 | ---- | 0.0     | 24.2 | ---- | 0.0      | 31.2 | ---- |
| Transient Cerebral Ischemia.....           | 12                 | 0.0                 | 1.5  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.7  | ---- |
| Stroke.....                                | 8                  | 0.0                 | 12.5 | ---- | 0.0     | 18.6 | ---- | 0.0      | 21.5 | ---- |
| Hip Fracture.....                          | 22                 | 0.0                 | 8.9  | ---- | 9.1     | 16.7 | ---- | 13.6     | 21.6 | ---- |
| Sepsis.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 59                 | 5.1                 | 1.8  | 3.2  | 6.8     | 3.5  | 3.6  | 8.5      | 4.8  | 3.7  |
| Open Reduction of Hip Fracture.....        | 7                  | 0.0                 | 10.2 | ---- | 0.0     | 19.4 | ---- | 0.0      | 25.1 | ---- |
| Prostatectomy.....                         | 7                  | 0.0                 | 0.5  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.3  | ---- |
| Cholecystectomy.....                       | 9                  | 11.1                | 4.0  | ---- | 11.1    | 8.4  | ---- | 11.1     | 11.5 | ---- |
| Hysterectomy.....                          | 69                 | 2.9                 | 1.0  | 2.4  | 7.2     | 2.3  | 5.7  | 8.7      | 3.8  | 6.3  |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# HUTZEL HOSPITAL

Medicare Provider Number: 230076

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 71.2 years |
| Proportion female.....        | 70.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 69.6 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 57.4 % |
| Admitted for emergency.....                    | 26.5 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 10.0 % |
| Chronic cardiovascular disease..... | 18.4 % |
| Chronic liver disease.....          | 0.7 %  |
| Chronic renal disease.....          | 2.5 %  |
| Chronic pulmonary disease.....      | 6.2 %  |
| Cerebrovascular degeneration.....   | 3.1 %  |
| Diabetes mellitus.....              | 10.2 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 80.0%  |
| State .....         | 17.8%  |
| Outside State ..... | 2.2%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 8.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 369                 |
| Occupancy Rate .....       | 80.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 7.7 %               |
| Case Mix Index (CMI) ..... | 1.1384              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 644    |
| Percent of Physicians Board<br>Certified Specialists..... | 69.7 % |
| Medical Residents/Interns .....                           | 2      |
| Registered Nurses.....                                    | 365    |
| Licensed Practical Nurses .....                           | 60     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | Yes |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | Yes |
| Rehabilitation.....       | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# INGHAM MEDICAL CENTER

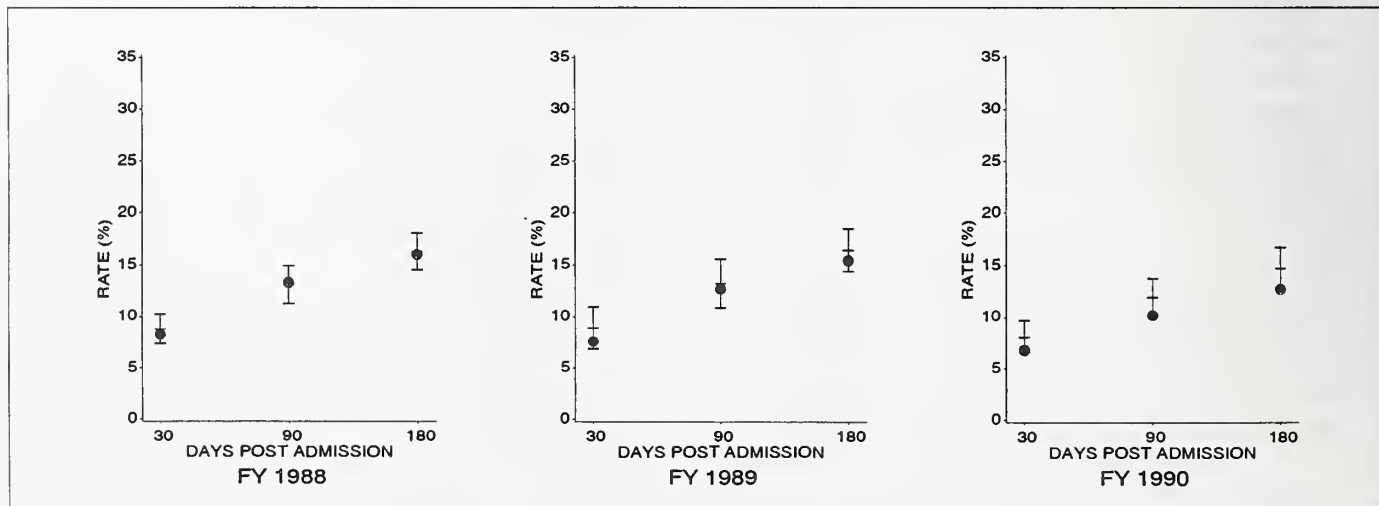
401 W GREENLAWN AVENUE  
LANSING, MI 48910  
Medicare Provider Number: 230129

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2068            | 6.8                 | 8.1  | 0.8  | 10.2    | 11.9 | 0.9  | 12.7     | 14.7 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 106             | 20.8                | 22.4 | 6.1  | 23.6    | 25.7 | 5.6  | 25.5     | 28.5 | 5.9  |
| Congestive Heart Failure.....              | 84              | 6.0                 | 15.7 | 5.6  | 14.3    | 25.3 | 6.5  | 21.4     | 31.9 | 6.6  |
| Pneumonia/Influenza.....                   | 70              | 20.0                | 14.6 | 6.6  | 30.0    | 20.1 | 8.5  | 32.9     | 24.3 | 8.5  |
| Chronic Obstructive Pulmonary Disease..... | 13              | 7.7                 | 6.3  | ---- | 7.7     | 11.3 | ---- | 15.4     | 15.2 | ---- |
| Transient Cerebral Ischemia.....           | 12              | 8.3                 | 2.6  | ---- | 8.3     | 5.3  | ---- | 8.3      | 8.1  | ---- |
| Stroke.....                                | 55              | 10.9                | 19.5 | 6.6  | 18.2    | 26.2 | 7.6  | 21.8     | 29.9 | 8.9  |
| Hip Fracture.....                          | 46              | 2.2                 | 6.5  | ---- | 2.2     | 11.5 | ---- | 4.3      | 14.7 | ---- |
| Sepsis.....                                | 30              | 10.0                | 19.3 | ---- | 13.3    | 25.9 | ---- | 16.7     | 30.0 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 60              | 1.7                 | 2.5  | 2.2  | 1.7     | 3.2  | 2.7  | 3.3      | 4.0  | 3.1  |
| Coronary Artery Bypass Graft.....          | 188             | 4.3                 | 5.6  | 3.0  | 5.3     | 8.2  | 4.0  | 6.4      | 9.3  | 4.1  |
| Initial Pacemaker Insertion.....           | 30              | 0.0                 | 2.3  | ---- | 3.3     | 4.8  | ---- | 3.3      | 7.1  | ---- |
| Carotid Endarterectomy.....                | 17              | 0.0                 | 1.1  | ---- | 0.0     | 2.0  | ---- | 0.0      | 3.0  | ---- |
| Hip Replacement/Reconstruction.....        | 110             | 1.8                 | 1.5  | 1.4  | 1.8     | 2.8  | 1.9  | 2.7      | 3.9  | 2.0  |
| Open Reduction of Hip Fracture.....        | 28              | 3.6                 | 6.4  | ---- | 3.6     | 11.7 | ---- | 7.1      | 15.2 | ---- |
| Prostatectomy.....                         | 96              | 0.0                 | 0.6  | 0.9  | 0.0     | 1.3  | 1.6  | 0.0      | 2.3  | 2.6  |
| Cholecystectomy.....                       | 29              | 0.0                 | 2.0  | ---- | 0.0     | 3.7  | ---- | 0.0      | 5.1  | ---- |
| Hysterectomy.....                          | 13              | 0.0                 | 1.2  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# INGHAM MEDICAL CENTER

Medicare Provider Number: 230129

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 73.5 years |
| Proportion female.....        | 51.0 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 55.1 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 35.5 % |
| Admitted for emergency.....                    | 42.5 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 4.9 %  |
| Chronic cardiovascular disease..... | 42.6 % |
| Chronic liver disease.....          | 0.6 %  |
| Chronic renal disease.....          | 4.1 %  |
| Chronic pulmonary disease.....      | 14.3 % |
| Cerebrovascular degeneration.....   | 3.2 %  |
| Diabetes mellitus.....              | 9.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 58.8%  |
| State .....         | 37.8%  |
| Outside State ..... | 3.4%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 8.2 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                  |
|----------------------------|------------------|
| Total Beds .....           | 258              |
| Occupancy Rate .....       | 58.0 %           |
| Ownership/Control.....     | Local Government |
| Medicare Discharges .....  | 36.1 %           |
| Case Mix Index (CMI) ..... | 1.9042           |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 250    |
| Percent of Physicians Board<br>Certified Specialists ..... | 75.6 % |
| Medical Residents/Interns .....                            | 38     |
| Registered Nurses.....                                     | 336    |
| Licensed Practical Nurses .....                            | 48     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | Yes |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# IONIA COUNTY MEMORIAL HOSPITAL

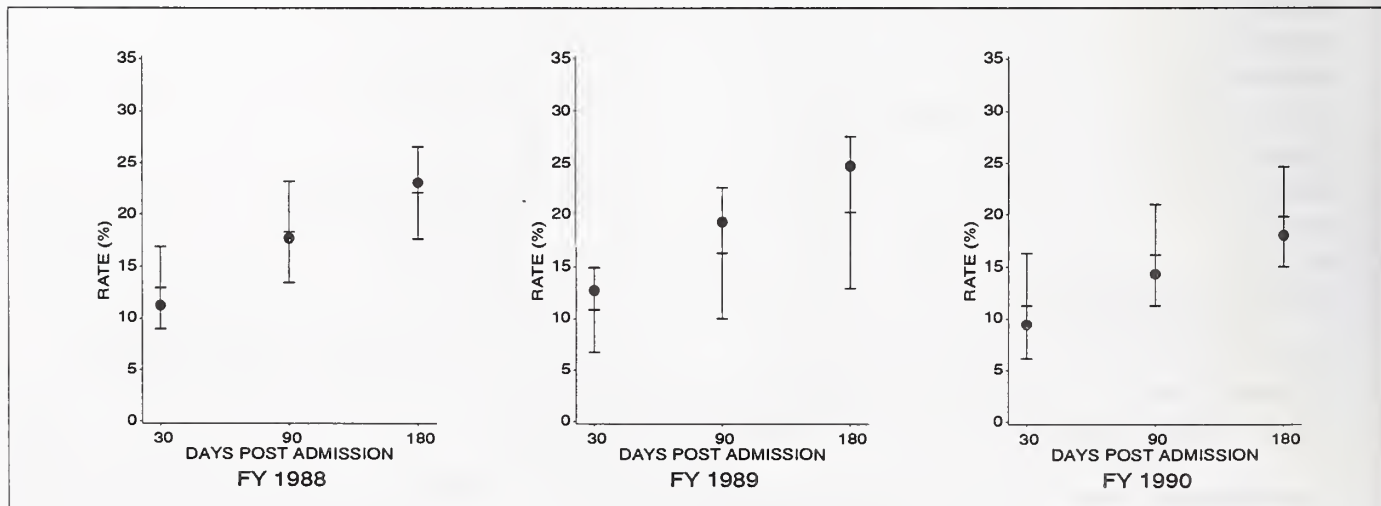
479 LAFAYETTE ST  
IONIA, MI 48846  
Medicare Provider Number: 230027

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 350             | 9.4                 | 11.2 | 2.6  | 14.3    | 16.1 | 2.5  | 18.0     | 19.8 | 2.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 14              | 28.6                | 27.6 | ---- | 28.6    | 30.4 | ---- | 28.6     | 33.0 | ---- |
| Congestive Heart Failure.....              | 34              | 5.9                 | 13.9 | ---- | 17.6    | 22.4 | ---- | 26.5     | 28.3 | ---- |
| Pneumonia/Influenza.....                   | 32              | 15.6                | 13.7 | ---- | 15.6    | 18.6 | ---- | 15.6     | 22.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 11.1                | 6.2  | ---- | 11.1    | 11.5 | ---- | 11.1     | 16.5 | ---- |
| Transient Cerebral Ischemia.....           | 7               | 0.0                 | 1.9  | ---- | 0.0     | 4.3  | ---- | 0.0      | 7.3  | ---- |
| Stroke.....                                | 21              | 9.5                 | 19.5 | ---- | 19.0    | 27.5 | ---- | 33.3     | 31.9 | ---- |
| Hip Fracture.....                          | 5               | 0.0                 | 9.6  | ---- | 0.0     | 17.2 | ---- | 0.0      | 22.0 | ---- |
| Sepsis.....                                | 7               | 0.0                 | 17.1 | ---- | 0.0     | 21.4 | ---- | 0.0      | 24.9 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 2.5  | ---- | 0.0     | 5.7  | ---- | 0.0      | 9.0  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 4               | 0.0                 | 9.2  | ---- | 0.0     | 17.0 | ---- | 0.0      | 21.6 | ---- |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 5               | 0.0                 | 3.1  | ---- | 20.0    | 6.5  | ---- | 20.0     | 8.9  | ---- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.1  | ---- | 0.0     | 0.1  | ---- | 0.0      | 0.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# IONIA COUNTY MEMORIAL HOSPITAL

Medicare Provider Number: 230027

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.2 years  
Proportion female..... 60.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 87.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 3.4 %  
Admitted for emergency..... 66.9 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 43.4 %  
Chronic liver disease..... 0.3 %  
Chronic renal disease..... 1.1 %  
Chronic pulmonary disease..... 12.9 %  
Cerebrovascular degeneration..... 4.3 %  
Diabetes mellitus..... 8.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 86.5%  
State..... 12.4%  
Outside State..... 1.1%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 7.5 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 77  
Occupancy Rate..... 27.0 %  
Ownership/Control..... Local Government  
Medicare Discharges..... 41.9 %  
Case Mix Index (CMI)..... 1.1426

### STAFFING:

Total Number of Physicians..... 10  
Percent of Physicians Board  
Certified Specialists..... 50.0 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 40  
Licensed Practical Nurses..... 9

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# IRON COUNTY GENERAL HOSPITAL

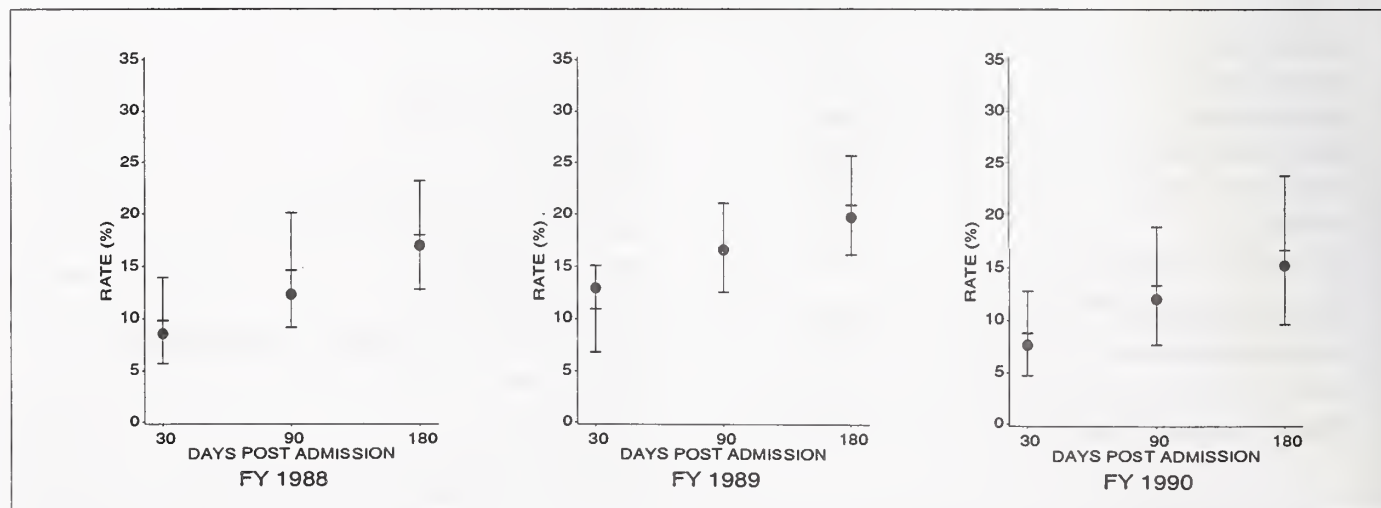
1400 W ICE LAKE RD  
IRON RIVER, MI 49935  
Medicare Provider Number: 230149

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 341             | 7.6                 | 8.7  | 2.0  | 12.0    | 13.3 | 2.8  | 15.2     | 16.7 | 3.6  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 20              | 0.0                 | 22.0 | ---- | 10.0    | 24.9 | ---- | 20.0     | 27.6 | ---- |
| Congestive Heart Failure.....              | 31              | 12.9                | 13.9 | ---- | 19.4    | 22.3 | ---- | 25.8     | 28.2 | ---- |
| Pneumonia/Influenza.....                   | 26              | 11.5                | 14.0 | ---- | 15.4    | 19.3 | ---- | 15.4     | 22.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 0.0                 | 5.7  | ---- | 20.0    | 9.6  | ---- | 20.0     | 13.3 | ---- |
| Transient Cerebral Ischemia.....           | 5               | 0.0                 | 1.3  | ---- | 0.0     | 2.9  | ---- | 0.0      | 5.2  | ---- |
| Stroke.....                                | 12              | 16.7                | 13.7 | ---- | 16.7    | 19.5 | ---- | 16.7     | 23.4 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 8               | 12.5                | 18.8 | ---- | 12.5    | 24.3 | ---- | 12.5     | 28.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 4               | 0.0                 | 0.8  | ---- | 0.0     | 1.5  | ---- | 0.0      | 2.0  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# IRON COUNTY GENERAL HOSPITAL

Medicare Provider Number: 230149

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.8 years |
| Proportion female.....        | 60.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 98.5 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 9.4 %  |
| Admitted for emergency.....                    | 39.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 3.8 %  |
| Chronic cardiovascular disease..... | 44.9 % |
| Chronic liver disease.....          | 0.0 %  |
| Chronic renal disease.....          | 3.2 %  |
| Chronic pulmonary disease.....      | 12.6 % |
| Cerebrovascular degeneration.....   | 2.1 %  |
| Diabetes mellitus.....              | 8.8 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 88.2%  |
| State .....         | 2.8%   |
| Outside State ..... | 9.0%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                  |
|----------------------------|------------------|
| Total Beds .....           | 36               |
| Occupancy Rate .....       | 33.0 %           |
| Ownership/Control.....     | Local Government |
| Medicare Discharges .....  | 59.2 %           |
| Case Mix Index (CMI) ..... | 1.1048           |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 7      |
| Percent of Physicians Board<br>Certified Specialists ..... | 71.4 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 18     |
| Licensed Practical Nurses .....                            | 14     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# KALKASKA MEMORIAL HEALTH CENTER

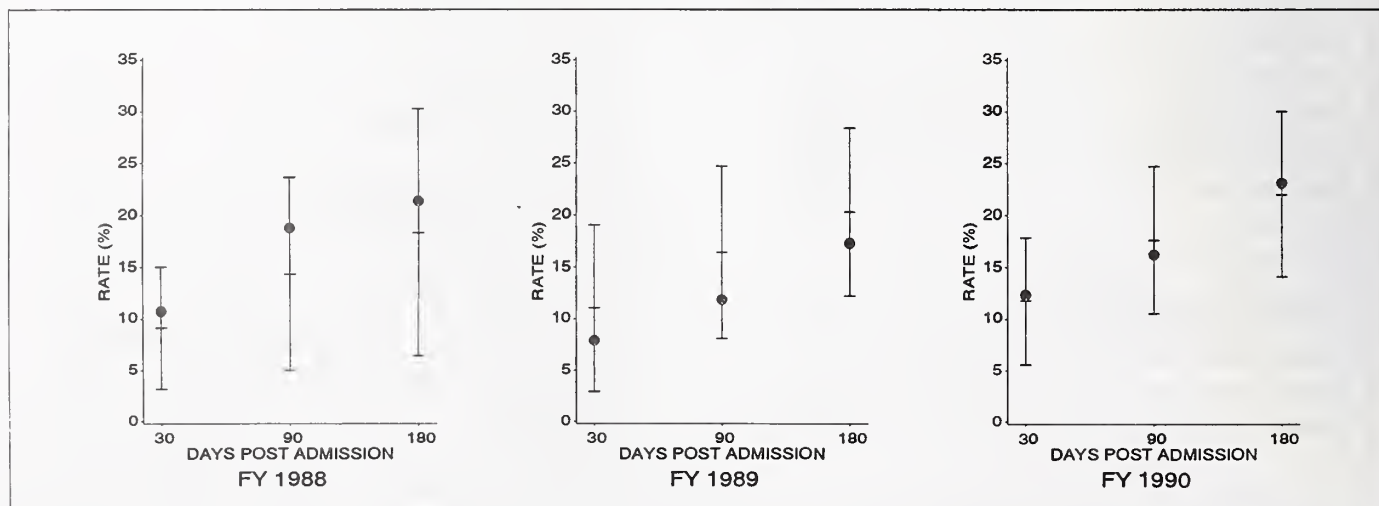
419 CORAL  
KALKASKA, MI 49646  
Medicare Provider Number: 230211

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 130                | 12.3                | 11.7 | 3.1   | 16.2    | 17.6 | 3.6   | 23.1     | 22.0 | 4.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 7                  | 14.3                | 32.7 | ----- | 14.3    | 35.5 | ----- | 28.6     | 37.9 | ----- |
| Congestive Heart Failure.....              | 19                 | 15.8                | 13.8 | ----- | 21.1    | 21.8 | ----- | 26.3     | 27.9 | ----- |
| Pneumonia/Influenza.....                   | 16                 | 18.8                | 15.4 | ----- | 31.3    | 21.0 | ----- | 37.5     | 25.0 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 4                  | 0.0                 | 5.1  | ----- | 0.0     | 12.3 | ----- | 25.0     | 19.5 | ----- |
| Stroke.....                                | 3                  | 0.0                 | 18.3 | ----- | 0.0     | 24.6 | ----- | 33.3     | 29.0 | ----- |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# KALKASKA MEMORIAL HEALTH CENTER

Medicare Provider Number: 230211

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.1 years  
Proportion female..... 60.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 36.9 %  
Transferred from skilled nursing facility..... 3.8 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 96.9 %

### COMORBIDITIES:

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 46.9 %  
Chronic liver disease..... 3.1 %  
Chronic renal disease..... 5.4 %  
Chronic pulmonary disease..... 17.7 %  
Cerebrovascular degeneration..... 6.9 %  
Diabetes mellitus..... 14.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 56.6%  
State ..... 41.2%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 81  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... District/Authority  
Medicare Discharges ..... 60.8 %  
Case Mix Index (CMI) ..... 0.9267

### STAFFING:

Total Number of Physicians..... 4  
Percent of Physicians Board  
Certified Specialists..... 100.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 13  
Licensed Practical Nurses ..... 15

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# KELSEY MEMORIAL HOSPITAL

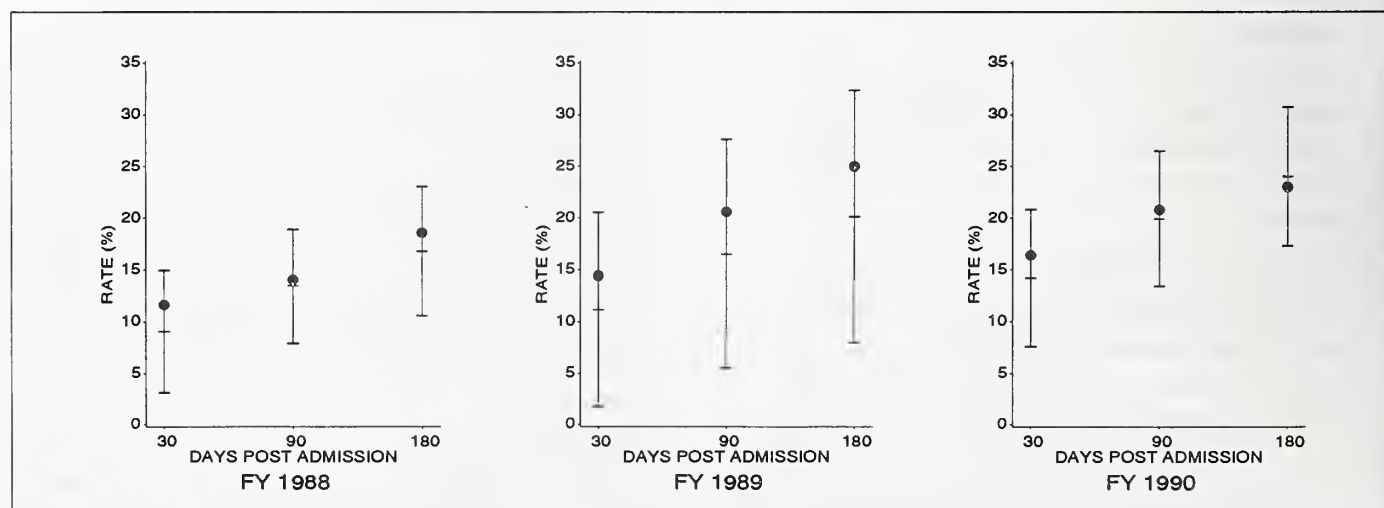
418 WASHINGTON AVE  
LAKEVIEW, MI 48850  
Medicare Provider Number: 230155

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 183                | 16.4                | 14.2 | 3.3   | 20.8    | 19.9 | 3.3   | 23.0     | 24.0 | 3.4   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 16                 | 25.0                | 28.5 | ----- | 31.3    | 31.2 | ----- | 31.3     | 33.6 | ----- |
| Congestive Heart Failure.....              | 11                 | 45.5                | 14.6 | ----- | 54.5    | 22.9 | ----- | 63.6     | 29.7 | ----- |
| Pneumonia/Influenza.....                   | 19                 | 10.5                | 16.2 | ----- | 15.8    | 22.4 | ----- | 26.3     | 26.4 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 2                  | 50.0                | 19.0 | ----- | 50.0    | 31.3 | ----- | 50.0     | 38.2 | ----- |
| Transient Cerebral Ischemia.....           | 1                  | 0.0                 | 2.9  | ----- | 0.0     | 6.1  | ----- | 0.0      | 10.2 | ----- |
| Stroke.....                                | 14                 | 35.7                | 27.7 | ----- | 42.9    | 35.1 | ----- | 42.9     | 39.1 | ----- |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 7                  | 14.3                | 21.6 | ----- | 28.6    | 26.8 | ----- | 28.6     | 31.2 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 2                  | 0.0                 | 0.9  | ----- | 0.0     | 1.5  | ----- | 0.0      | 1.9  | ----- |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# KELSEY MEMORIAL HOSPITAL

Medicare Provider Number: 230155

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.7 years

Proportion female..... 60.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.1 %

Transferred from skilled nursing facility..... 7.7 %

Admitted for elective procedure..... 2.2 %

Admitted for emergency..... 71.0 %

### COMORBIDITIES:

Cancer..... 9.8 %

Chronic cardiovascular disease..... 45.4 %

Chronic liver disease..... 1.1 %

Chronic renal disease..... 4.4 %

Chronic pulmonary disease..... 15.3 %

Cerebrovascular degeneration..... 6.0 %

Diabetes mellitus..... 17.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 60.7%

State ..... 37.2%

Outside State ..... 2.1%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.5 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 94

Occupancy Rate ..... 51.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 34.3 %

Case Mix Index (CMI) ..... 1.0174

### STAFFING:

Total Number of Physicians..... 10

Percent of Physicians Board  
Certified Specialists..... 20.0 %

Medical Residents/Interns ..... 0

Registered Nurses..... 20

Licensed Practical Nurses..... 7

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# KENT COMMUNITY HOSPITAL

750 FULLER AVE N E  
GRAND RAPIDS, MI 49503  
Medicare Provider Number: 230276

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 104                | 1.0                 | 0.4  | ----- | 1.0     | 1.2  | ----- | 1.0      | 2.3  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# KENT COMMUNITY HOSPITAL

Medicare Provider Number: 230276

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 49.5 years  
Proportion female..... 15.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 0.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 1.9 %  
Chronic cardiovascular disease..... 3.8 %  
Chronic liver disease..... 2.9 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 16.3 %  
Cerebrovascular degeneration..... 6.7 %  
Diabetes mellitus..... 2.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 46.5%  
State ..... 49.3%  
Outside State ..... 4.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 16.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 502  
Occupancy Rate ..... 81.0 %  
Ownership/Control..... Local Government  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 0.8372

### STAFFING:

Total Number of Physicians..... (Not Available)  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses ..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# LAKE VIEW COMMUNITY HOSPITAL

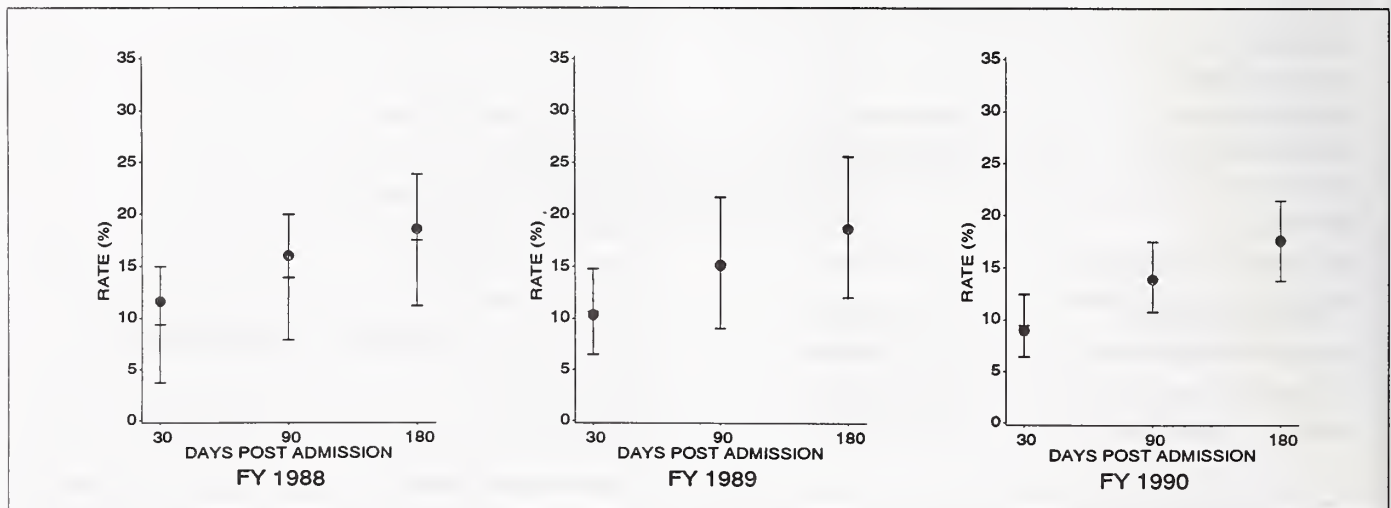
408 HAZEN ST, BOX 209  
PAW PAW, MI 49079  
Medicare Provider Number: 230172

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 425             | 8.9                 | 9.4  | 1.5  | 13.9    | 14.1 | 1.7  | 17.6     | 17.6 | 1.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 7               | 0.0                 | 37.3 | ---- | 0.0     | 41.2 | ---- | 0.0      | 44.4 | ---- |
| Congestive Heart Failure.....              | 34              | 8.8                 | 16.6 | ---- | 14.7    | 25.5 | ---- | 17.6     | 31.9 | ---- |
| Pneumonia/Influenza.....                   | 33              | 12.1                | 17.9 | ---- | 15.2    | 24.9 | ---- | 27.3     | 29.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 5.9  | ---- | 16.7    | 9.9  | ---- | 16.7     | 14.3 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 1.5  | ---- | 0.0     | 3.6  | ---- | 0.0      | 6.0  | ---- |
| Stroke.....                                | 15              | 20.0                | 20.8 | ---- | 26.7    | 26.8 | ---- | 33.3     | 30.8 | ---- |
| Hip Fracture.....                          | 16              | 12.5                | 6.1  | ---- | 12.5    | 11.6 | ---- | 12.5     | 15.3 | ---- |
| Sepsis.....                                | 2               | 0.0                 | 25.9 | ---- | 0.0     | 34.9 | ---- | 50.0     | 41.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 6               | 0.0                 | 4.5  | ---- | 0.0     | 8.4  | ---- | 0.0      | 11.2 | ---- |
| Open Reduction of Hip Fracture.....        | 7               | 14.3                | 4.4  | ---- | 14.3    | 8.8  | ---- | 14.3     | 11.8 | ---- |
| Prostatectomy.....                         | 28              | 0.0                 | 0.6  | ---- | 0.0     | 1.4  | ---- | 0.0      | 2.6  | ---- |
| Cholecystectomy.....                       | 13              | 0.0                 | 0.9  | ---- | 0.0     | 1.9  | ---- | 7.7      | 2.8  | ---- |
| Hysterectomy.....                          | 8               | 12.5                | 0.6  | ---- | 12.5    | 1.5  | ---- | 12.5     | 2.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# LAKE VIEW COMMUNITY HOSPITAL

Medicare Provider Number: 230172

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.5 years

Proportion female..... 57.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.2 %

Transferred from skilled nursing facility..... 1.2 %

Admitted for elective procedure..... 16.2 %

Admitted for emergency..... 50.4 %

### COMORBIDITIES:

Cancer..... 8.5 %

Chronic cardiovascular disease..... 33.6 %

Chronic liver disease..... 0.7 %

Chronic renal disease..... 1.4 %

Chronic pulmonary disease..... 16.9 %

Cerebrovascular degeneration..... 5.9 %

Diabetes mellitus..... 5.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 84.2%

State..... 11.8%

Outside State..... 4.0%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 6.0 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 174

Occupancy Rate..... 86.0 %

Ownership/Control..... District/Authority

Medicare Discharges..... 36.8 %

Case Mix Index (CMI)..... 1.1406

### STAFFING:

Total Number of Physicians..... 33

Percent of Physicians Board  
Certified Specialists..... 90.9 %

Medical Residents/Interns..... 0

Registered Nurses..... 64

Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... Yes

Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# LAKESHORE COMMUNITY HOSPITAL

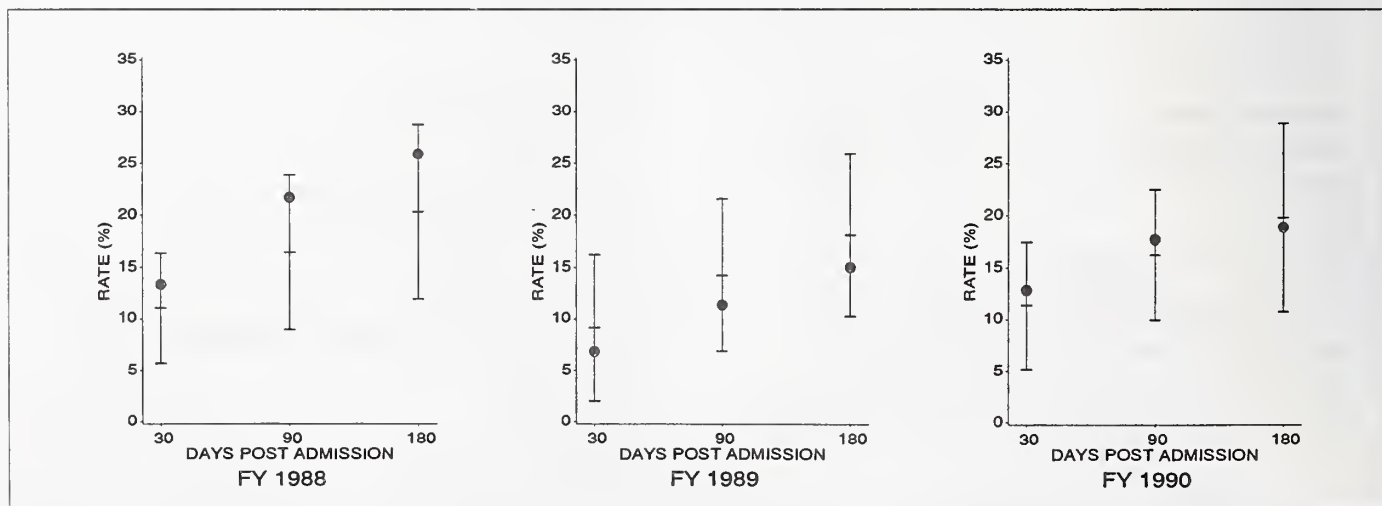
72 S STATE ST  
SHELBY, MI 49455  
Medicare Provider Number: 230171

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 164                | 12.8                | 11.3 | 3.1  | 17.7    | 16.2 | 3.1  | 18.9     | 19.8 | 4.6  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 7                  | 42.9                | 18.9 | ---- | 42.9    | 21.4 | ---- | 42.9     | 23.9 | ---- |
| Congestive Heart Failure.....              | 19                 | 10.5                | 12.7 | ---- | 21.1    | 19.5 | ---- | 26.3     | 25.6 | ---- |
| Pneumonia/Influenza.....                   | 9                  | 0.0                 | 18.0 | ---- | 0.0     | 24.0 | ---- | 0.0      | 27.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 4                  | 25.0                | 12.2 | ---- | 50.0    | 20.6 | ---- | 50.0     | 26.9 | ---- |
| Transient Cerebral Ischemia.....           | 2                  | 0.0                 | 0.9  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.9  | ---- |
| Stroke.....                                | 5                  | 20.0                | 18.4 | ---- | 40.0    | 25.6 | ---- | 40.0     | 30.4 | ---- |
| Hip Fracture.....                          | 0                  |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1                  | 0.0                 | 28.1 | ---- | 0.0     | 33.0 | ---- | 0.0      | 36.9 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 5                  | 0.0                 | 0.9  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.2  | ---- |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.1  | ---- | 0.0     | 0.1  | ---- | 0.0      | 0.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# LAKE SHORE COMMUNITY HOSPITAL

Medicare Provider Number: 230171

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.9 years  
Proportion female..... 47.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 29.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.2 %  
Admitted for emergency..... 66.5 %

### COMORBIDITIES:

Cancer..... 6.1 %  
Chronic cardiovascular disease..... 32.3 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 3.0 %  
Chronic pulmonary disease..... 15.9 %  
Cerebrovascular degeneration..... 2.4 %  
Diabetes mellitus..... 13.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 73.9%  
State ..... 22.7%  
Outside State ..... 3.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 35  
Occupancy Rate ..... 20.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... (Not Available)  
Case Mix Index (CMI) ..... 1.0230

### STAFFING:

Total Number of Physicians..... (Not Available)  
Percent of Physicians Board  
Certified Specialists ..... (Not Available)  
Medical Residents/Interns ..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses ..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LANSING GENERAL HOSPITAL

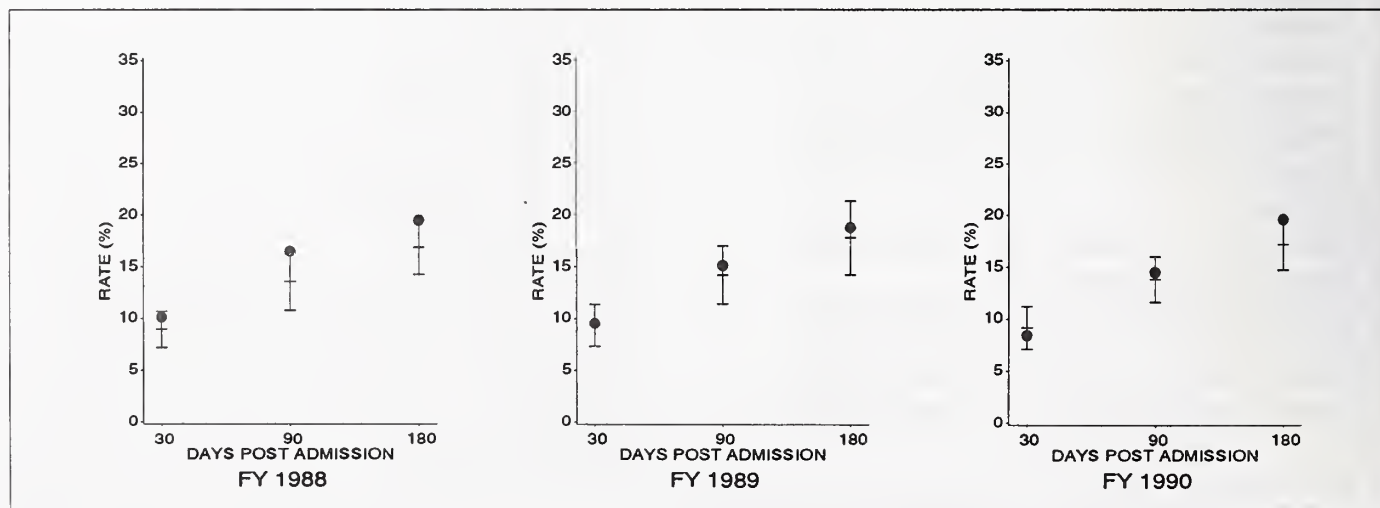
2800 DEVONSHIRE  
LANSING, MI 48909  
Medicare Provider Number: 230167

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1401            | 8.4                 | 9.1  | 1.0   | 14.5    | 13.8 | 1.1   | 19.6     | 17.2 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 45              | 17.8                | 22.8 | ----- | 24.4    | 25.9 | ----- | 28.9     | 28.6 | ----- |
| Congestive Heart Failure.....              | 79              | 17.7                | 14.2 | 4.5   | 22.8    | 22.5 | 4.8   | 27.8     | 28.5 | 5.2   |
| Pneumonia/Influenza.....                   | 75              | 16.0                | 16.4 | 5.1   | 25.3    | 22.2 | 6.1   | 29.3     | 26.1 | 7.6   |
| Chronic Obstructive Pulmonary Disease..... | 21              | 4.8                 | 9.2  | ----- | 19.0    | 16.2 | ----- | 23.8     | 21.4 | ----- |
| Transient Cerebral Ischemia.....           | 21              | 0.0                 | 1.9  | ----- | 0.0     | 4.3  | ----- | 4.8      | 7.0  | ----- |
| Stroke.....                                | 46              | 23.9                | 19.2 | ----- | 28.3    | 25.6 | ----- | 37.0     | 29.2 | ----- |
| Hip Fracture.....                          | 39              | 12.8                | 6.3  | ----- | 30.8    | 11.2 | ----- | 35.9     | 14.6 | ----- |
| Sepsis.....                                | 9               | 22.2                | 21.8 | ----- | 22.2    | 30.4 | ----- | 22.2     | 35.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 14              | 0.0                 | 2.8  | ----- | 7.1     | 5.5  | ----- | 14.3     | 7.9  | ----- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 2.0  | ----- | 0.0     | 3.7  | ----- | 0.0      | 5.6  | ----- |
| Hip Replacement/Reconstruction.....        | 24              | 0.0                 | 3.7  | ----- | 16.7    | 6.8  | ----- | 20.8     | 9.1  | ----- |
| Open Reduction of Hip Fracture.....        | 24              | 12.5                | 5.6  | ----- | 20.8    | 10.2 | ----- | 20.8     | 13.5 | ----- |
| Prostatectomy.....                         | 31              | 0.0                 | 0.7  | ----- | 3.2     | 1.7  | ----- | 6.5      | 3.1  | ----- |
| Cholecystectomy.....                       | 25              | 4.0                 | 2.6  | ----- | 8.0     | 5.1  | ----- | 12.0     | 6.8  | ----- |
| Hysterectomy.....                          | 10              | 0.0                 | 0.5  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# LANSING GENERAL HOSPITAL

Medicare Provider Number: 230167

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.9 years

Proportion female..... 59.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.8 %

Transferred from skilled nursing facility..... 0.1 %

Admitted for elective procedure..... 41.5 %

Admitted for emergency..... 57.3 %

### COMORBIDITIES:

Cancer..... 5.9 %

Chronic cardiovascular disease..... 35.1 %

Chronic liver disease..... 0.9 %

Chronic renal disease..... 3.1 %

Chronic pulmonary disease..... 15.7 %

Cerebrovascular degeneration..... 4.6 %

Diabetes mellitus..... 11.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 67.6%

State..... 31.0%

Outside State..... 1.4%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 9.6 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 251

Occupancy Rate..... 62.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges..... 33.6 %

Case Mix Index (CMI)..... 1.1823

### STAFFING:

Total Number of Physicians..... 163

Percent of Physicians Board  
Certified Specialists..... 30.7 %

Medical Residents/Interns..... 34

Registered Nurses..... 200

Licensed Practical Nurses..... 91

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes

Rehabilitation..... Yes

Psychiatric..... Yes

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LAPEER REGIONAL HOSPITAL

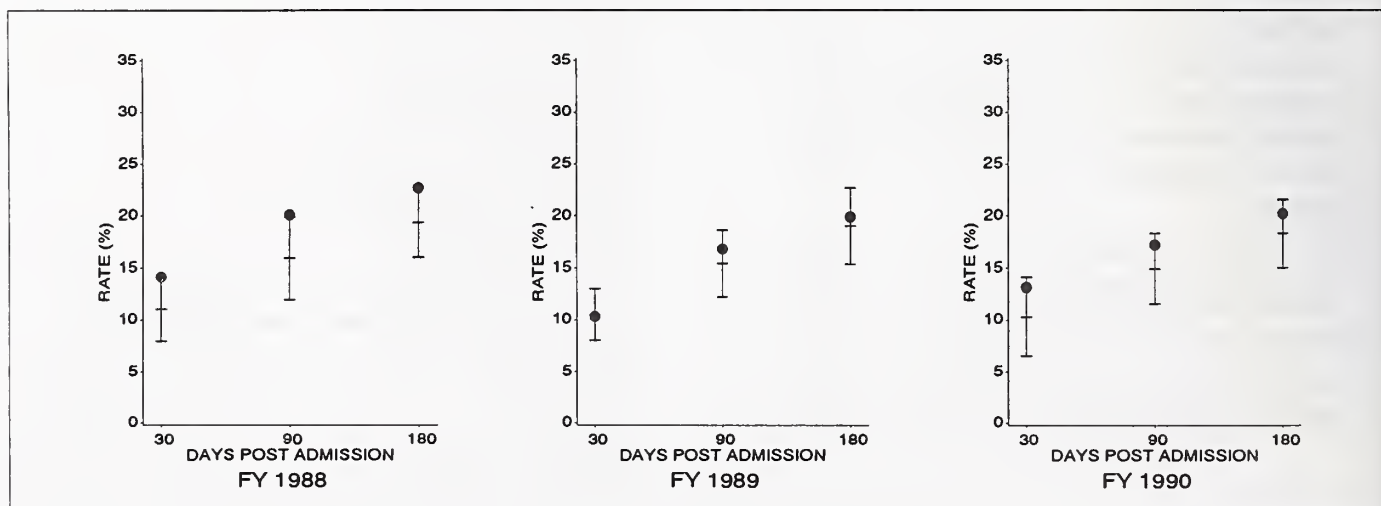
1375 N MAIN ST  
LAPEER, MI 48446  
Medicare Provider Number: 230193

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1017               | 13.1                | 10.3 | 1.9   | 17.2    | 14.9 | 1.7   | 20.2     | 18.3 | 1.6   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 45                 | 22.2                | 27.6 | ----- | 28.9    | 30.7 | ----- | 31.1     | 33.2 | ----- |
| Congestive Heart Failure.....              | 59                 | 23.7                | 14.5 | 9.3   | 25.4    | 22.8 | 7.2   | 32.2     | 29.1 | 8.1   |
| Pneumonia/Influenza.....                   | 37                 | 21.6                | 16.3 | ----- | 21.6    | 22.4 | ----- | 29.7     | 26.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 18                 | 0.0                 | 7.3  | ----- | 5.6     | 12.6 | ----- | 5.6      | 17.0 | ----- |
| Transient Cerebral Ischemia.....           | 16                 | 6.3                 | 1.2  | ----- | 6.3     | 3.0  | ----- | 6.3      | 5.1  | ----- |
| Stroke.....                                | 59                 | 16.9                | 18.1 | 6.8   | 20.3    | 23.7 | 6.8   | 23.7     | 27.1 | 8.5   |
| Hip Fracture.....                          | 34                 | 8.8                 | 6.0  | ----- | 17.6    | 10.7 | ----- | 23.5     | 14.2 | ----- |
| Sepsis.....                                | 18                 | 22.2                | 24.5 | ----- | 27.8    | 30.9 | ----- | 27.8     | 35.1 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 8                  | 12.5                | 2.1  | ----- | 12.5    | 4.4  | ----- | 12.5     | 6.7  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 27                 | 7.4                 | 2.9  | ----- | 7.4     | 5.5  | ----- | 14.8     | 7.6  | ----- |
| Open Reduction of Hip Fracture.....        | 16                 | 6.3                 | 5.9  | ----- | 18.8    | 11.0 | ----- | 25.0     | 14.6 | ----- |
| Prostatectomy.....                         | 51                 | 5.9                 | 1.2  | 3.9   | 7.8     | 2.7  | 4.9   | 7.8      | 4.4  | 5.3   |
| Cholecystectomy.....                       | 31                 | 0.0                 | 2.9  | ----- | 6.5     | 5.4  | ----- | 6.5      | 7.0  | ----- |
| Hysterectomy.....                          | 14                 | 7.1                 | 0.6  | ----- | 7.1     | 1.3  | ----- | 7.1      | 2.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# LAPEER REGIONAL HOSPITAL

Medicare Provider Number: 230193

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.5 years  
Proportion female..... 54.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.9 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 28.2 %  
Admitted for emergency..... 58.0 %

### COMORBIDITIES:

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 33.3 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 4.0 %  
Chronic pulmonary disease..... 19.1 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 6.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 61.6%  
State ..... 35.2%  
Outside State ..... 3.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 182  
Occupancy Rate ..... 56.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 29.0 %  
Case Mix Index (CMI) ..... 1.2452

### STAFFING:

Total Number of Physicians..... 65  
Percent of Physicians Board  
Certified Specialists..... 50.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 154  
Licensed Practical Nurses ..... 44

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# LEE MEMORIAL HOSPITAL

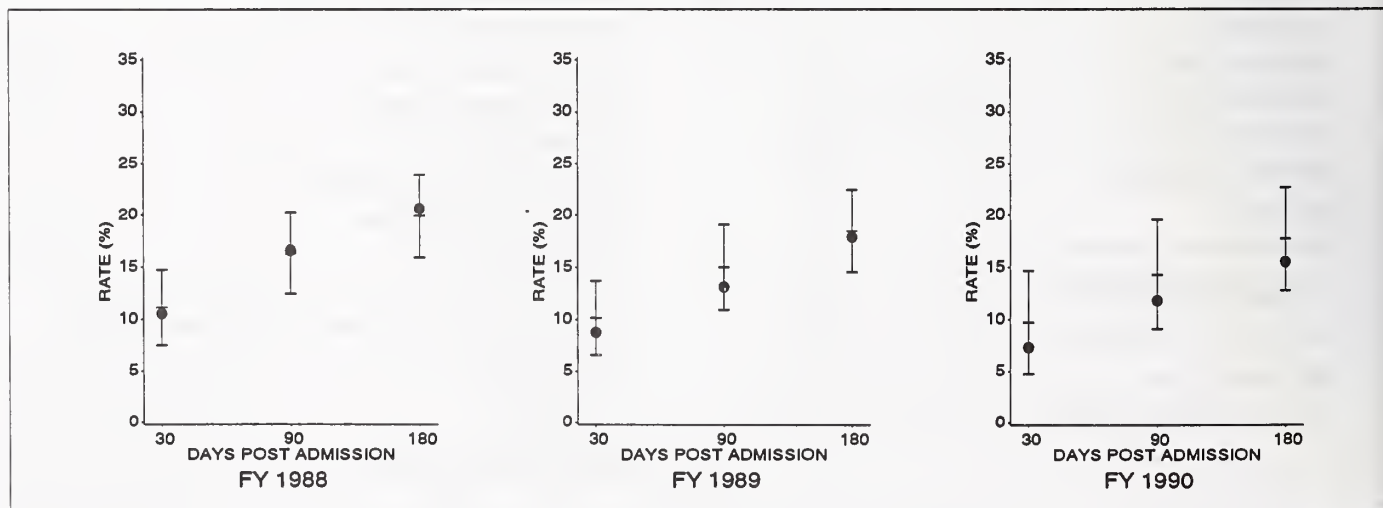
420 WEST HIGH STREET  
DOWAGIAC, MI 49047  
Medicare Provider Number: 230199

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 440             | 7.3                 | 9.7  | 2.5   | 11.8    | 14.3 | 2.6   | 15.5     | 17.7 | 2.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 13              | 15.4                | 25.3 | ----- | 15.4    | 28.0 | ----- | 15.4     | 30.7 | ----- |
| Congestive Heart Failure.....              | 38              | 5.3                 | 14.4 | ----- | 23.7    | 22.5 | ----- | 23.7     | 28.8 | ----- |
| Pneumonia/Influenza.....                   | 42              | 11.9                | 15.3 | ----- | 16.7    | 21.0 | ----- | 26.2     | 24.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 4.2  | ----- | 0.0     | 8.3  | ----- | 16.7     | 11.5 | ----- |
| Transient Cerebral Ischemia.....           | 4               | 25.0                | 2.0  | ----- | 25.0    | 4.7  | ----- | 25.0     | 8.1  | ----- |
| Stroke.....                                | 7               | 28.6                | 22.0 | ----- | 42.9    | 27.1 | ----- | 42.9     | 30.7 | ----- |
| Hip Fracture.....                          | 12              | 0.0                 | 8.2  | ----- | 0.0     | 14.5 | ----- | 0.0      | 19.1 | ----- |
| Sepsis.....                                | 5               | 0.0                 | 34.4 | ----- | 0.0     | 42.4 | ----- | 20.0     | 45.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 1.3  | ----- | 0.0     | 3.0  | ----- | 0.0      | 5.3  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 7.4  | ----- | 0.0     | 13.3 | ----- | 0.0      | 17.6 | ----- |
| Open Reduction of Hip Fracture.....        | 6               | 0.0                 | 6.6  | ----- | 0.0     | 11.7 | ----- | 0.0      | 15.0 | ----- |
| Prostatectomy.....                         | 21              | 4.8                 | 1.7  | ----- | 9.5     | 4.1  | ----- | 14.3     | 7.0  | ----- |
| Cholecystectomy.....                       | 12              | 0.0                 | 1.7  | ----- | 0.0     | 2.8  | ----- | 0.0      | 3.5  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 1.6  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# LEE MEMORIAL HOSPITAL

Medicare Provider Number: 230199

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.4 years |
| Proportion female.....        | 56.6 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 24.5 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 2.0 %  |
| Admitted for emergency.....                    | 74.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.0 %  |
| Chronic cardiovascular disease..... | 35.2 % |
| Chronic liver disease.....          | 0.7 %  |
| Chronic renal disease.....          | 5.0 %  |
| Chronic pulmonary disease.....      | 21.6 % |
| Cerebrovascular degeneration.....   | 3.4 %  |
| Diabetes mellitus.....              | 3.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 80.3%  |
| State .....         | 16.1%  |
| Outside State ..... | 3.6%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |        |
|----------------------------|--------|
| Total Beds .....           | 63     |
| Occupancy Rate .....       | 39.0 % |
| Ownership/Control.....     | Church |
| Medicare Discharges .....  | 40.1 % |
| Case Mix Index (CMI) ..... | 1.1837 |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 13     |
| Percent of Physicians Board<br>Certified Specialists..... | 38.5 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 58     |
| Licensed Practical Nurses.....                            | 7      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# LEELANAU MEMORIAL HOSPITAL

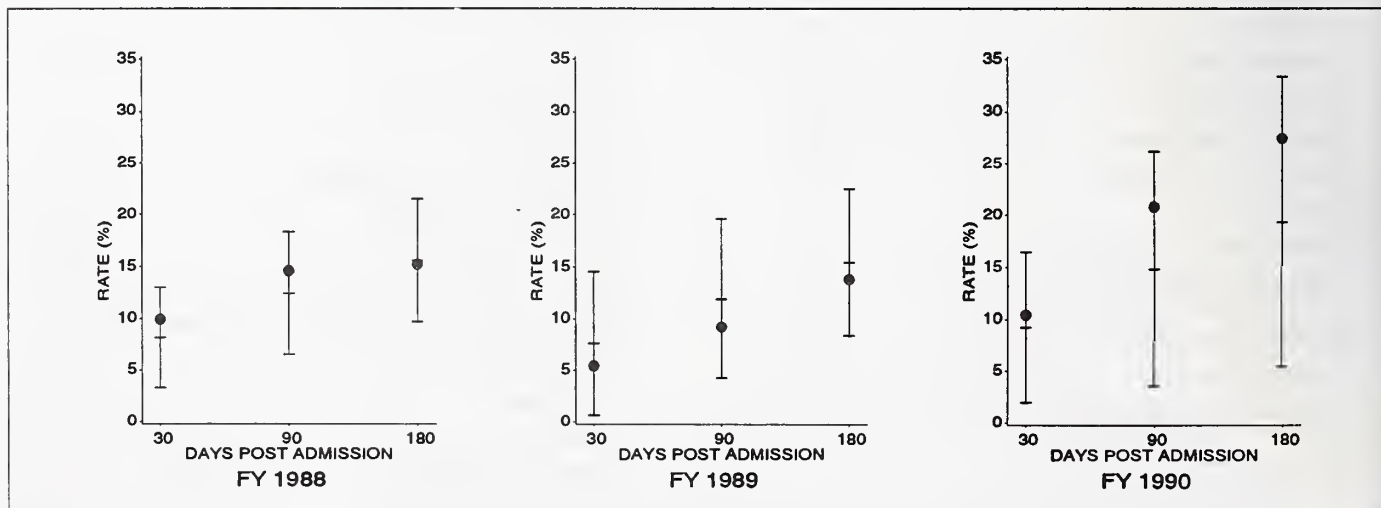
SOUTH HIGH ST  
NORTHPORT, MI 49670  
Medicare Provider Number: 230107

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 106             | 10.4                | 9.2  | 3.6   | 20.8    | 14.8 | 5.7   | 27.4     | 19.3 | 7.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 2               | 100.0               | 39.1 | ----- | 100.0   | 44.5 | ----- | 100.0    | 48.7 | ----- |
| Congestive Heart Failure.....              | 7               | 14.3                | 12.7 | ----- | 14.3    | 20.1 | ----- | 28.6     | 27.0 | ----- |
| Pneumonia/Influenza.....                   | 9               | 22.2                | 13.8 | ----- | 22.2    | 19.7 | ----- | 22.2     | 23.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 1               | 0.0                 | 33.0 | ----- | 0.0     | 36.9 | ----- | 0.0      | 41.5 | ----- |
| Hip Fracture.....                          | 1               | 100.0               | 6.5  | ----- | 100.0   | 12.6 | ----- | 100.0    | 16.7 | ----- |
| Sepsis.....                                | 1               | 100.0               | 28.7 | ----- | 100.0   | 38.6 | ----- | 100.0    | 46.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 1               | 0.0                 | 0.7  | ----- | 100.0   | 1.8  | ----- | 100.0    | 3.2  | ----- |
| Cholecystectomy.....                       | 0               |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 1               | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# LEELANAU MEMORIAL HOSPITAL

Medicare Provider Number: 230107

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 78.4 years

Proportion female..... 51.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 53.3 %

Transferred from skilled nursing facility..... 10.3 %

Admitted for elective procedure..... 1.9 %

Admitted for emergency..... 31.8 %

### COMORBIDITIES:

Cancer..... 10.3 %

Chronic cardiovascular disease..... 32.7 %

Chronic liver disease..... 3.7 %

Chronic renal disease..... 1.9 %

Chronic pulmonary disease..... 8.4 %

Cerebrovascular degeneration..... 3.7 %

Diabetes mellitus..... 11.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 81.2%

State..... 7.5%

Outside State..... 11.3%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.3 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 90

Occupancy Rate..... 63.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges..... 46.2 %

Case Mix Index (CMI)..... 1.0410

### STAFFING:

Total Number of Physicians..... 36

Percent of Physicians Board  
Certified Specialists..... 72.2 %

Medical Residents/Interns..... 0

Registered Nurses..... 9

Licensed Practical Nurses..... 4

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... Yes

Hospice Care..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# MACKINAC STRAITS HOSPITAL & HLTH CENTER

220 BURDETTE ST  
ST IGNACE, MI 49781  
Medicare Provider Number: 230162

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 36                 | 16.7                | 11.5 | ---- | 25.0    | 15.8 | ---- | 30.6     | 20.0 | ---- |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 3                  | 33.3                | 36.2 | ---- | 33.3    | 38.5 | ---- | 33.3     | 41.7 | ---- |
| Congestive Heart Failure.....              | 5                  | 40.0                | 15.7 | ---- | 40.0    | 23.4 | ---- | 40.0     | 29.9 | ---- |
| Pneumonia/Influenza.....                   | 4                  | 0.0                 | 19.0 | ---- | 25.0    | 25.0 | ---- | 25.0     | 31.1 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 2                  | 0.0                 | 7.4  | ---- | 0.0     | 11.4 | ---- | 50.0     | 15.4 | ---- |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Fracture.....                          | 0                  |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0                  |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



# MACKINAC STRAITS HOSPITAL & HLTH CENTER

Medicare Provider Number: 230162

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 80.0 years  
Proportion female..... 69.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 11.1 %  
Transferred from skilled nursing facility..... 5.6 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 77.8 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 38.9 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 16.7 %  
Cerebrovascular degeneration..... 11.1 %  
Diabetes mellitus..... 11.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.0%  
State ..... 21.2%  
Outside State ..... 3.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 15  
Ownership/Control..... District/Authority  
Case Mix Index (CMI) ..... 0.9430

### STAFFING:

Medical Residents/Interns ..... 0  
Registered Nurses..... 12  
Licensed Practical Nurses ..... 0

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... No  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MACOMB HOSPITAL CENTER

11800 EAST TWELVE MILE ROAD

WARREN, MI 48093

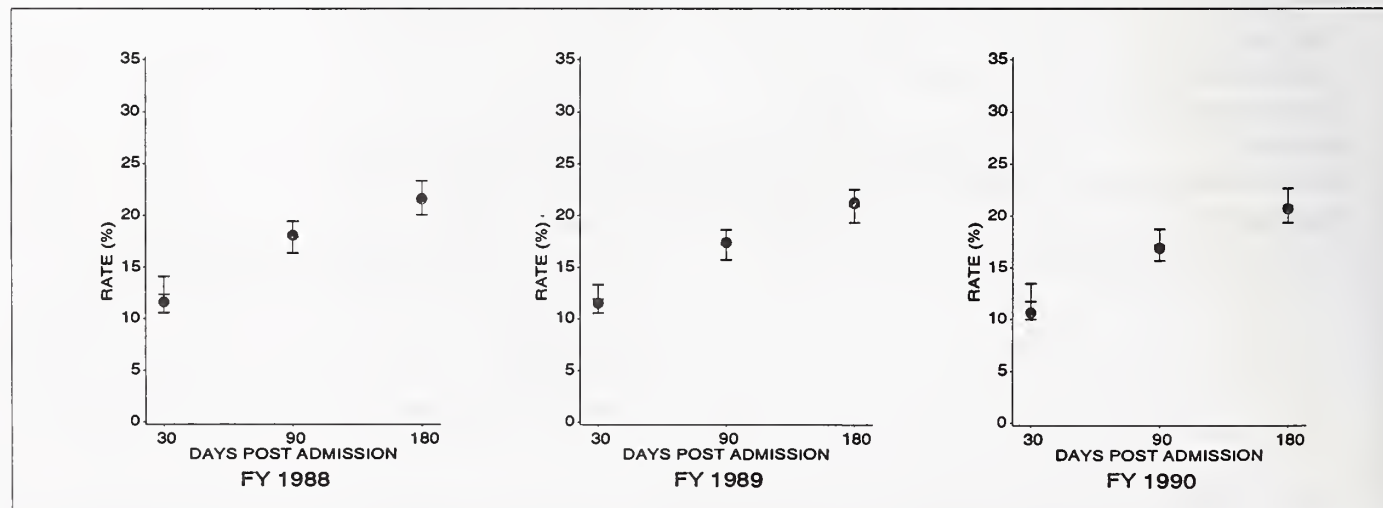
Medicare Provider Number: 230195

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2610            | 10.6                | 11.7 | 0.9   | 16.9    | 17.2 | 0.8   | 20.7     | 21.0 | 0.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 103             | 26.2                | 30.0 | 6.9   | 28.2    | 32.6 | 7.2   | 30.1     | 35.0 | 6.8   |
| Congestive Heart Failure.....              | 167             | 15.0                | 15.5 | 3.0   | 26.3    | 24.2 | 4.2   | 31.1     | 30.4 | 6.7   |
| Pneumonia/Influenza.....                   | 41              | 22.0                | 16.6 | ----- | 39.0    | 23.2 | ----- | 41.5     | 27.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 15              | 13.3                | 13.9 | ----- | 20.0    | 22.8 | ----- | 33.3     | 28.4 | ----- |
| Transient Cerebral Ischemia.....           | 46              | 2.2                 | 1.7  | ----- | 6.5     | 4.1  | ----- | 6.5      | 7.0  | ----- |
| Stroke.....                                | 147             | 15.6                | 19.9 | 4.3   | 25.9    | 27.2 | 4.1   | 30.6     | 31.2 | 4.3   |
| Hip Fracture.....                          | 83              | 7.2                 | 9.2  | 3.6   | 16.9    | 15.2 | 4.5   | 21.7     | 19.0 | 6.5   |
| Sepsis.....                                | 49              | 32.7                | 27.5 | ----- | 42.9    | 36.1 | ----- | 44.9     | 40.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 16              | 0.0                 | 6.8  | ----- | 6.3     | 11.3 | ----- | 6.3      | 14.3 | ----- |
| Carotid Endarterectomy.....                | 31              | 0.0                 | 2.4  | ----- | 0.0     | 4.2  | ----- | 6.5      | 5.9  | ----- |
| Hip Replacement/Reconstruction.....        | 38              | 0.0                 | 5.6  | ----- | 5.3     | 9.4  | ----- | 7.9      | 12.0 | ----- |
| Open Reduction of Hip Fracture.....        | 49              | 8.2                 | 9.2  | ----- | 20.4    | 15.9 | ----- | 26.5     | 20.1 | ----- |
| Prostatectomy.....                         | 106             | 0.0                 | 1.0  | 1.5   | 2.8     | 2.3  | 1.5   | 3.8      | 3.9  | 2.0   |
| Cholecystectomy.....                       | 62              | 0.0                 | 2.5  | 3.3   | 1.6     | 4.3  | 4.5   | 3.2      | 5.5  | 4.7   |
| Hysterectomy.....                          | 24              | 4.2                 | 0.8  | ----- | 8.3     | 1.8  | ----- | 8.3      | 2.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MACOMB HOSPITAL CENTER

Medicare Provider Number: 230195

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.3 years  
Proportion female..... 57.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 13.9 %  
Admitted for emergency..... 79.0 %

### COMORBIDITIES:

Cancer..... 8.8 %  
Chronic cardiovascular disease..... 60.6 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 3.6 %  
Chronic pulmonary disease..... 21.1 %  
Cerebrovascular degeneration..... 3.7 %  
Diabetes mellitus..... 7.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 83.0%  
State ..... 15.8%  
Outside State ..... 1.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 391  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 1.3249

### STAFFING:

Medical Residents/Interns ..... 80  
Registered Nurses..... 231  
Licensed Practical Nurses ..... 132

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used In calculating mortality rates

# MADISON COMMUNITY HOSPITAL

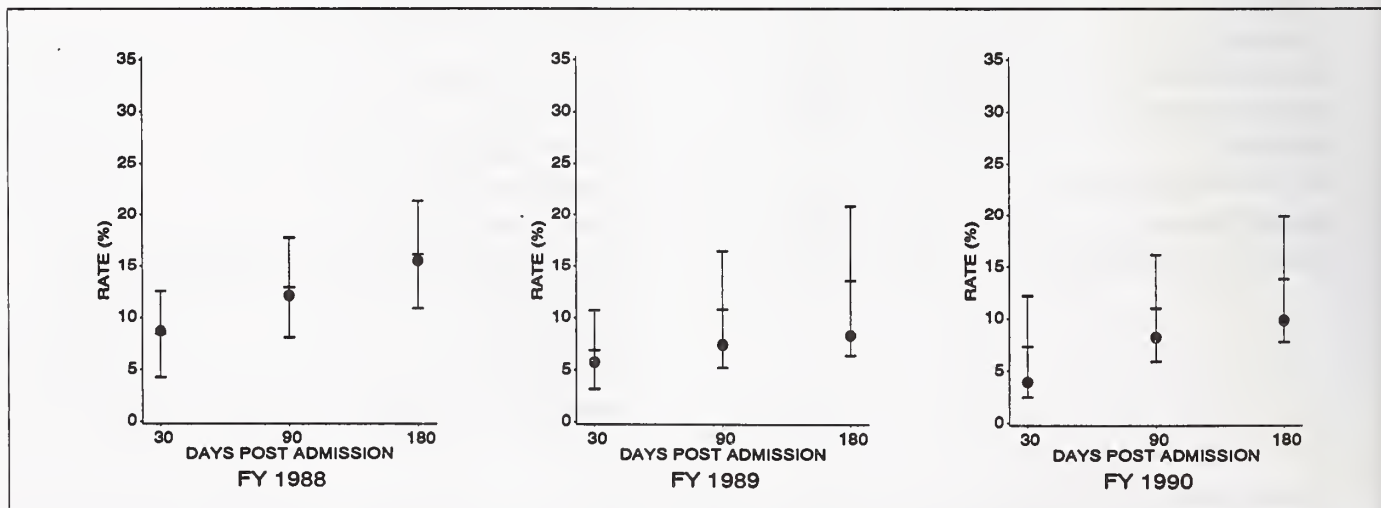
30671 STEPHENSON HIGHWAY  
MADISON HEIGHTS, MI 48071  
Medicare Provider Number: 230186

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 256             | 3.9                 | 7.3  | 2.4   | 8.2     | 11.0 | 2.6   | 9.8      | 13.8 | 3.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 3               | 66.7                | 32.7 | ----- | 66.7    | 35.0 | ----- | 66.7     | 37.8 | ----- |
| Congestive Heart Failure.....              | 13              | 7.7                 | 12.6 | ----- | 15.4    | 20.5 | ----- | 23.1     | 26.9 | ----- |
| Pneumonia/Influenza.....                   | 26              | 3.8                 | 13.4 | ----- | 19.2    | 18.6 | ----- | 23.1     | 22.2 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 1               | 0.0                 | 9.5  | ----- | 0.0     | 13.9 | ----- | 0.0      | 17.7 | ----- |
| Transient Cerebral Ischemia.....           | 1               | 0.0                 | 2.4  | ----- | 0.0     | 5.0  | ----- | 0.0      | 7.9  | ----- |
| Stroke.....                                | 9               | 11.1                | 17.3 | ----- | 11.1    | 22.2 | ----- | 11.1     | 25.8 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 2               | 0.0                 | 30.8 | ----- | 0.0     | 35.8 | ----- | 0.0      | 41.0 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 19              | 5.3                 | 1.8  | ----- | 5.3     | 3.6  | ----- | 5.3      | 5.3  | ----- |
| Cholecystectomy.....                       | 12              | 0.0                 | 0.6  | ----- | 0.0     | 1.1  | ----- | 0.0      | 1.6  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MADISON COMMUNITY HOSPITAL

Medicare Provider Number: 230186

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 71.3 years |
| Proportion female.....        | 51.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 73.0 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 16.8 % |
| Admitted for emergency.....                    | 17.6 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.9 %  |
| Chronic cardiovascular disease..... | 28.5 % |
| Chronic liver disease.....          | 0.8 %  |
| Chronic renal disease.....          | 0.0 %  |
| Chronic pulmonary disease.....      | 11.3 % |
| Cerebrovascular degeneration.....   | 3.1 %  |
| Diabetes mellitus.....              | 9.0 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 65.2%  |
| State .....         | 33.4%  |
| Outside State ..... | 1.4%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.8 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 50                  |
| Occupancy Rate .....       | 56.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 33.5 %              |
| Case Mix Index (CMI) ..... | 1.0231              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 27     |
| Percent of Physicians Board<br>Certified Specialists ..... | 77.8 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 27     |
| Licensed Practical Nurses .....                            | 9      |

### SPECIALTY SERVICES:

|                                       |    |
|---------------------------------------|----|
| Burn Unit .....                       | No |
| Cardiac Intensive Care .....          | No |
| Comprehensive Geriatric .....         | No |
| Hospice Care .....                    | No |
| Medical/Surgical Intensive Care ..... | No |
| Organ/Tissue Transplant .....         | No |
| Other Intensive Care .....            | No |
| Trauma Center .....                   | No |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# MARLETTE COMMUNITY HOSPITAL

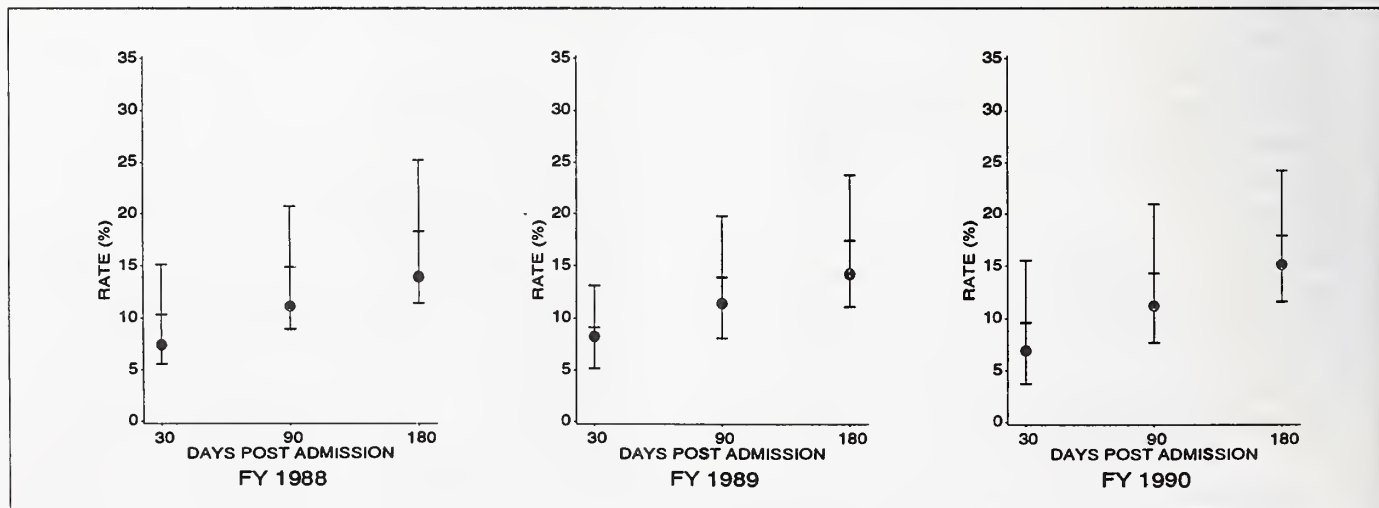
2770 MAIN STREET  
MARLETTE, MI 48453  
Medicare Provider Number: 230082

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 259             | 6.9                 | 9.6  | 3.0   | 11.2    | 14.3 | 3.3   | 15.1     | 17.9 | 3.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 7               | 0.0                 | 26.0 | ----- | 0.0     | 29.3 | ----- | 14.3     | 32.6 | ----- |
| Congestive Heart Failure.....              | 16              | 12.5                | 13.9 | ----- | 12.5    | 21.4 | ----- | 12.5     | 27.4 | ----- |
| Pneumonia/Influenza.....                   | 22              | 9.1                 | 14.4 | ----- | 13.6    | 19.8 | ----- | 18.2     | 23.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 6               | 0.0                 | 7.9  | ----- | 16.7    | 13.3 | ----- | 16.7     | 17.5 | ----- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 1.5  | ----- | 33.3    | 3.6  | ----- | 33.3     | 6.5  | ----- |
| Stroke.....                                | 10              | 20.0                | 18.2 | ----- | 30.0    | 24.4 | ----- | 30.0     | 28.3 | ----- |
| Hip Fracture.....                          | 2               | 0.0                 | 4.1  | ----- | 0.0     | 7.6  | ----- | 0.0      | 10.6 | ----- |
| Sepsis.....                                | 2               | 0.0                 | 27.5 | ----- | 0.0     | 35.8 | ----- | 0.0      | 39.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 5               | 0.0                 | 4.2  | ----- | 0.0     | 8.1  | ----- | 0.0      | 11.7 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 2               | 0.0                 | 4.2  | ----- | 0.0     | 7.9  | ----- | 0.0      | 10.7 | ----- |
| Prostatectomy.....                         | 9               | 0.0                 | 0.8  | ----- | 0.0     | 1.7  | ----- | 11.1     | 2.9  | ----- |
| Cholecystectomy.....                       | 5               | 0.0                 | 1.4  | ----- | 0.0     | 2.3  | ----- | 0.0      | 3.0  | ----- |
| Hysterectomy.....                          | 3               | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MARLETTE COMMUNITY HOSPITAL

Medicare Provider Number: 230082

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.5 years  
Proportion female..... 51.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 10.4 %  
Admitted for emergency..... 61.8 %

### COMORBIDITIES:

Cancer..... 7.3 %  
Chronic cardiovascular disease..... 35.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 4.6 %  
Chronic pulmonary disease..... 18.9 %  
Cerebrovascular degeneration..... 0.8 %  
Diabetes mellitus..... 7.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 57.7%  
State..... 38.8%  
Outside State..... 3.5%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.1 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 74  
Occupancy Rate..... 68.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 49.7 %  
Case Mix Index (CMI)..... 1.0770

### STAFFING:

Total Number of Physicians..... 8  
Percent of Physicians Board  
Certified Specialists..... 62.5 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 24  
Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... Yes  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# MARQUETTE GENERAL HOSPITAL

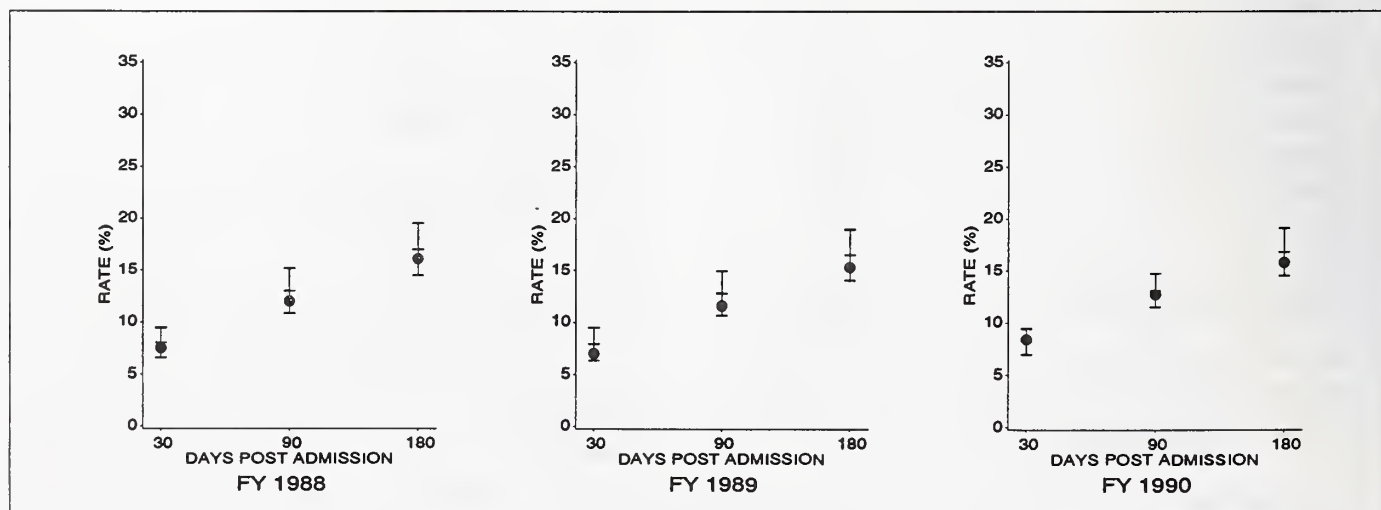
420 WEST MAGNETIC STREET  
MARQUETTE, MI 49855  
Medicare Provider Number: 230054

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2184            | 8.4                 | 8.2  | 0.6  | 12.7    | 13.1 | 0.8  | 15.8     | 16.8 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 57              | 22.8                | 22.2 | 5.6  | 24.6    | 25.1 | 6.6  | 26.3     | 27.6 | 6.7  |
| Congestive Heart Failure.....              | 81              | 13.6                | 14.7 | 6.7  | 21.0    | 23.2 | 6.3  | 27.2     | 29.7 | 5.9  |
| Pneumonia/Influenza.....                   | 70              | 17.1                | 17.7 | 4.6  | 22.9    | 24.0 | 5.2  | 24.3     | 28.3 | 6.5  |
| Chronic Obstructive Pulmonary Disease..... | 15              | 20.0                | 10.0 | ---- | 20.0    | 17.9 | ---- | 26.7     | 23.5 | ---- |
| Transient Cerebral Ischemia.....           | 27              | 0.0                 | 2.2  | ---- | 0.0     | 5.3  | ---- | 3.7      | 8.7  | ---- |
| Stroke.....                                | 71              | 25.4                | 21.3 | 5.5  | 29.6    | 27.8 | 5.9  | 32.4     | 31.6 | 6.8  |
| Hip Fracture.....                          | 72              | 4.2                 | 5.5  | 3.6  | 6.9     | 10.1 | 4.6  | 13.9     | 13.4 | 4.8  |
| Sepsis.....                                | 16              | 18.8                | 25.8 | ---- | 25.0    | 33.4 | ---- | 31.3     | 38.5 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 54              | 0.0                 | 1.9  | ---- | 0.0     | 2.6  | ---- | 0.0      | 3.3  | ---- |
| Coronary Artery Bypass Graft.....          | 101             | 3.0                 | 5.3  | 3.2  | 5.0     | 7.3  | 4.0  | 5.0      | 8.2  | 4.3  |
| Initial Pacemaker Insertion.....           | 35              | 2.9                 | 2.7  | ---- | 11.4    | 5.6  | ---- | 14.3     | 8.3  | ---- |
| Carotid Endarterectomy.....                | 16              | 0.0                 | 1.5  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.3  | ---- |
| Hip Replacement/Reconstruction.....        | 80              | 1.2                 | 2.8  | 2.3  | 5.0     | 5.4  | 2.7  | 6.3      | 7.5  | 3.1  |
| Open Reduction of Hip Fracture.....        | 37              | 5.4                 | 4.7  | ---- | 5.4     | 8.7  | ---- | 13.5     | 11.8 | ---- |
| Prostatectomy.....                         | 76              | 0.0                 | 0.9  | 1.3  | 0.0     | 2.0  | 2.3  | 0.0      | 3.5  | 3.4  |
| Cholecystectomy.....                       | 47              | 6.4                 | 3.9  | ---- | 8.5     | 6.9  | ---- | 12.8     | 9.1  | ---- |
| Hysterectomy.....                          | 25              | 8.0                 | 0.3  | ---- | 8.0     | 0.7  | ---- | 8.0      | 1.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MARQUETTE GENERAL HOSPITAL

Medicare Provider Number: 230054

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.1 years  
Proportion female..... 50.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 54.6 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 34.8 %  
Admitted for emergency..... 40.3 %

### COMORBIDITIES:

Cancer..... 11.9 %  
Chronic cardiovascular disease..... 36.4 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 4.2 %  
Chronic pulmonary disease..... 12.4 %  
Cerebrovascular degeneration..... 4.0 %  
Diabetes mellitus..... 7.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 48.6%  
State ..... 48.9%  
Outside State ..... 2.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 307  
Occupancy Rate ..... 72.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 38.7 %  
Case Mix Index (CMI) ..... 1.5645

### STAFFING:

Total Number of Physicians..... 111  
Percent of Physicians Board  
Certified Specialists..... 82.9 %  
Medical Residents/Interns ..... 16  
Registered Nurses..... 260  
Licensed Practical Nurses ..... 91

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation ..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MCKENZIE MEMORIAL HOSPITAL

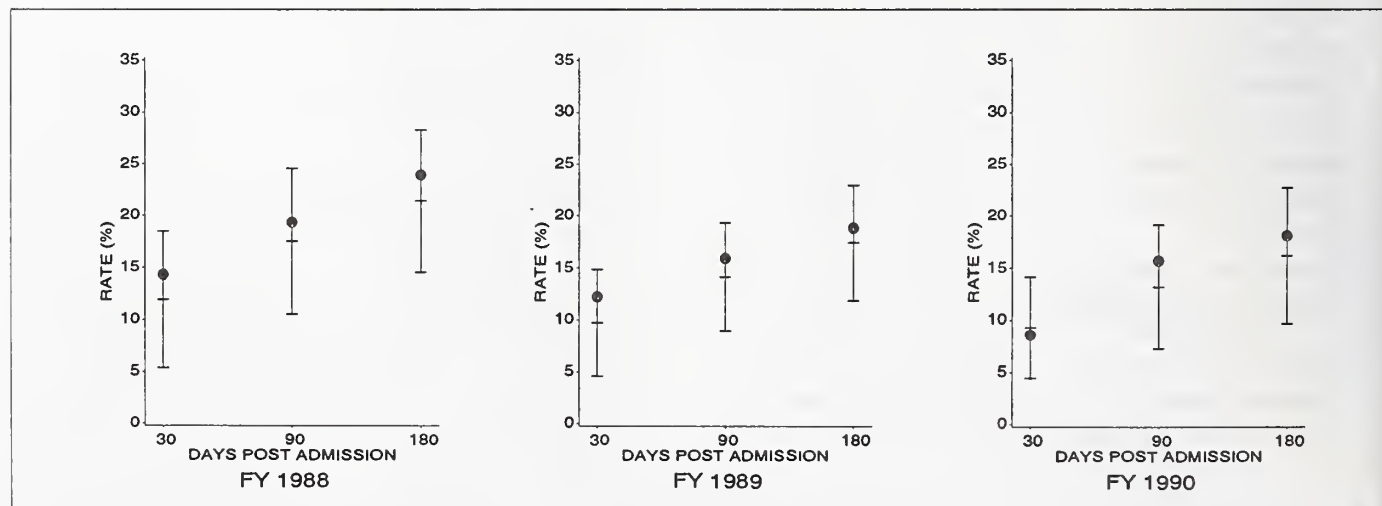
120 DELAWARE STREET  
SANDUSKY, MI 48471  
Medicare Provider Number: 230253

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 210             | 8.6                 | 9.3  | 2.4  | 15.7    | 13.2 | 3.0  | 18.1     | 16.2 | 3.3  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 13              | 23.1                | 24.0 | ---- | 23.1    | 26.0 | ---- | 30.8     | 28.4 | ---- |
| Congestive Heart Failure.....              | 8               | 25.0                | 14.7 | ---- | 37.5    | 22.8 | ---- | 37.5     | 29.2 | ---- |
| Pneumonia/Influenza.....                   | 13              | 0.0                 | 16.1 | ---- | 7.7     | 21.5 | ---- | 7.7      | 25.4 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 11.1                | 10.4 | ---- | 44.4    | 17.4 | ---- | 44.4     | 22.2 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 1.3  | ---- | 0.0     | 3.3  | ---- | 0.0      | 5.9  | ---- |
| Stroke.....                                | 15              | 0.0                 | 21.4 | ---- | 6.7     | 27.0 | ---- | 13.3     | 30.6 | ---- |
| Hip Fracture.....                          | 1               | 0.0                 | 6.3  | ---- | 0.0     | 9.1  | ---- | 0.0      | 11.4 | ---- |
| Sepsis.....                                | 1               | 0.0                 | 4.9  | ---- | 0.0     | 7.0  | ---- | 0.0      | 8.9  | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 1.7  | ---- | 0.0     | 3.8  | ---- | 0.0      | 6.1  | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 1               | 0.0                 | 5.9  | ---- | 0.0     | 8.8  | ---- | 0.0      | 11.1 | ---- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 10              | 0.0                 | 0.4  | ---- | 0.0     | 0.9  | ---- | 0.0      | 1.5  | ---- |
| Cholecystectomy.....                       | 5               | 0.0                 | 1.9  | ---- | 0.0     | 3.2  | ---- | 20.0     | 4.1  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.3  | ---- | 0.0     | 0.8  | ---- | 0.0      | 1.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MCKENZIE MEMORIAL HOSPITAL

Medicare Provider Number: 230253

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years  
Proportion female..... 56.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 31.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 8.1 %  
Admitted for emergency..... 69.0 %

### COMORBIDITIES:

Cancer..... 1.4 %  
Chronic cardiovascular disease..... 39.0 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 9.0 %  
Cerebrovascular degeneration..... 5.7 %  
Diabetes mellitus..... 9.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 91.9%  
State..... 6.2%  
Outside State..... 1.9%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 4.2 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 31  
Occupancy Rate..... 29.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 30.6 %  
Case Mix Index (CMI)..... 1.1097

### STAFFING:

Total Number of Physicians..... 11  
Percent of Physicians Board  
Certified Specialists..... 63.6 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 20  
Licensed Practical Nurses..... 10

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MCLAREN GENERAL HOSPITAL

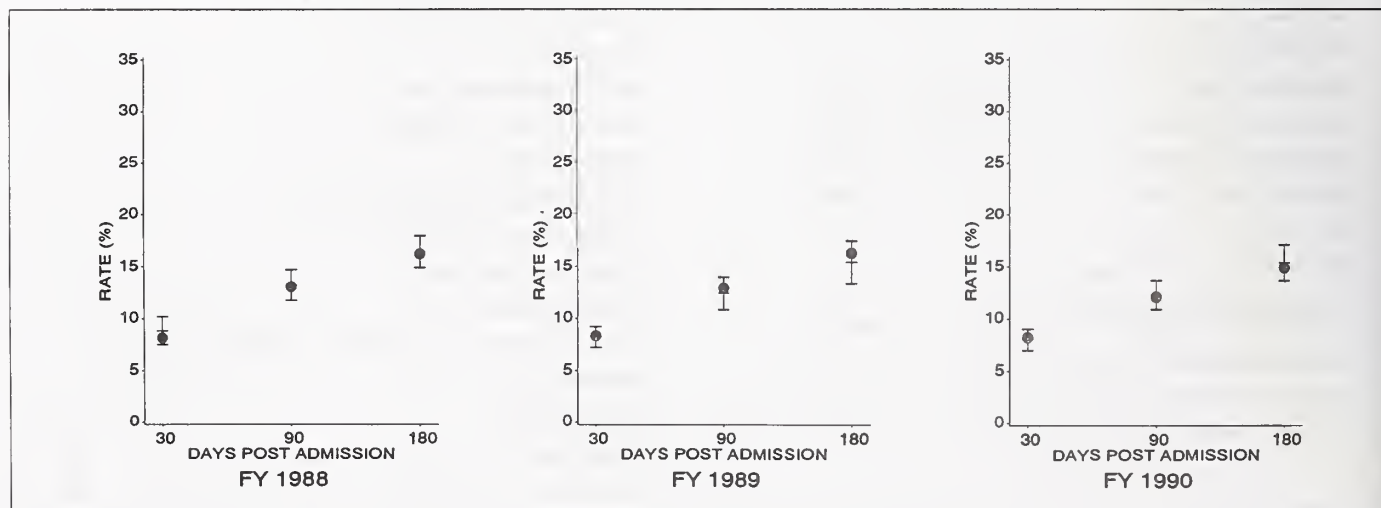
401 BALLENGER HWY  
FLINT, MI 48532  
Medicare Provider Number: 230141

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3373            | 8.2                 | 8.0  | 0.5   | 12.1    | 12.3 | 0.7   | 14.9     | 15.4 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 129             | 24.0                | 22.2 | 3.8   | 27.9    | 25.6 | 4.2   | 31.0     | 28.3 | 4.6   |
| Congestive Heart Failure.....              | 203             | 16.3                | 14.6 | 3.7   | 27.1    | 23.1 | 4.6   | 35.0     | 29.6 | 5.8   |
| Pneumonia/Influenza.....                   | 85              | 11.8                | 14.9 | 5.3   | 16.5    | 20.5 | 6.8   | 17.6     | 24.1 | 8.3   |
| Chronic Obstructive Pulmonary Disease..... | 48              | 14.6                | 9.6  | ----- | 18.7    | 16.0 | ----- | 27.1     | 20.3 | ----- |
| Transient Cerebral Ischemia.....           | 49              | 0.0                 | 1.8  | ----- | 2.0     | 4.2  | ----- | 2.0      | 6.8  | ----- |
| Stroke.....                                | 104             | 18.3                | 17.6 | 3.8   | 24.0    | 24.6 | 4.3   | 25.0     | 28.5 | 4.7   |
| Hip Fracture.....                          | 69              | 2.9                 | 6.5  | 4.0   | 8.7     | 11.6 | 4.8   | 13.0     | 15.1 | 4.5   |
| Sepsis.....                                | 20              | 15.0                | 21.4 | ----- | 20.0    | 26.7 | ----- | 25.0     | 30.2 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 68              | 1.5                 | 3.3  | 4.5   | 1.5     | 4.4  | 4.8   | 2.9      | 5.3  | 4.7   |
| Coronary Artery Bypass Graft.....          | 122             | 2.5                 | 5.4  | 3.1   | 4.1     | 7.8  | 4.3   | 4.1      | 8.9  | 4.3   |
| Initial Pacemaker Insertion.....           | 15              | 0.0                 | 4.0  | ----- | 0.0     | 7.6  | ----- | 13.3     | 10.8 | ----- |
| Carotid Endarterectomy.....                | 64              | 1.6                 | 1.7  | 1.7   | 6.3     | 3.1  | 3.4   | 6.3      | 4.5  | 3.2   |
| Hip Replacement/Reconstruction.....        | 93              | 0.0                 | 2.0  | 1.9   | 0.0     | 3.8  | 3.0   | 1.1      | 5.2  | 3.4   |
| Open Reduction of Hip Fracture.....        | 41              | 4.9                 | 6.8  | ----- | 14.6    | 12.3 | ----- | 19.5     | 16.2 | ----- |
| Prostatectomy.....                         | 161             | 0.0                 | 0.9  | 1.1   | 0.0     | 2.0  | 2.1   | 0.6      | 3.4  | 2.7   |
| Cholecystectomy.....                       | 54              | 1.9                 | 1.8  | 1.9   | 1.9     | 3.1  | 2.7   | 1.9      | 4.0  | 3.3   |
| Hysterectomy.....                          | 42              | 0.0                 | 0.2  | ----- | 0.0     | 0.5  | ----- | 0.0      | 0.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MCLAREN GENERAL HOSPITAL

Medicare Provider Number: 230141

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.9 years  
Proportion female..... 55.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 46.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 24.1 %  
Admitted for emergency..... 51.6 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 48.6 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 18.7 %  
Cerebrovascular degeneration..... 3.6 %  
Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 83.6%  
State..... 14.1%  
Outside State..... 2.3%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 9.0 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 416  
Occupancy Rate..... 82.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 40.1 %  
Case Mix Index (CMI)..... 1.4967

### STAFFING:

Total Number of Physicians..... 224  
Percent of Physicians Board  
Certified Specialists..... 65.2 %  
Medical Residents/Interns..... 47  
Registered Nurses..... 315  
Licensed Practical Nurses..... 145

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... Yes  
Other Intensive Care..... Yes  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... Yes  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MCPHERSON HOSPITAL

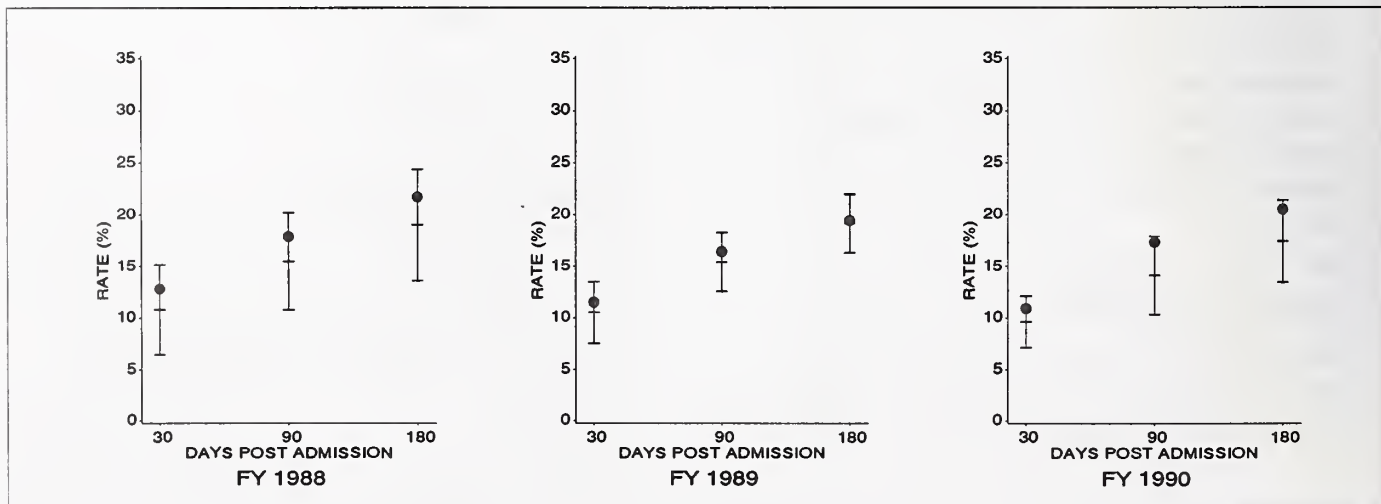
620 BYRON RD  
HOWELL, MI 48843  
Medicare Provider Number: 230069

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 774                | 10.9                | 9.6  | 1.2   | 17.3    | 14.1 | 1.9   | 20.5     | 17.4 | 2.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 22                 | 36.4                | 27.1 | ----- | 40.9    | 29.3 | ----- | 40.9     | 31.8 | ----- |
| Congestive Heart Failure.....              | 38                 | 7.9                 | 15.5 | ----- | 26.3    | 23.9 | ----- | 31.6     | 29.7 | ----- |
| Pneumonia/Influenza.....                   | 47                 | 12.8                | 18.2 | ----- | 27.7    | 25.3 | ----- | 34.0     | 29.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 19                 | 15.8                | 11.8 | ----- | 26.3    | 20.2 | ----- | 36.8     | 26.0 | ----- |
| Transient Cerebral Ischemia.....           | 10                 | 10.0                | 1.2  | ----- | 10.0    | 2.7  | ----- | 10.0     | 4.6  | ----- |
| Stroke.....                                | 31                 | 16.1                | 19.4 | ----- | 29.0    | 27.1 | ----- | 32.3     | 31.1 | ----- |
| Hip Fracture.....                          | 38                 | 15.8                | 7.3  | ----- | 23.7    | 12.8 | ----- | 28.9     | 16.3 | ----- |
| Sepsis.....                                | 15                 | 33.3                | 29.1 | ----- | 46.7    | 35.2 | ----- | 46.7     | 38.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 3                  | 0.0                 | 1.4  | ----- | 0.0     | 3.2  | ----- | 0.0      | 4.9  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 24                 | 8.3                 | 4.6  | ----- | 8.3     | 8.4  | ----- | 8.3      | 11.0 | ----- |
| Open Reduction of Hip Fracture.....        | 20                 | 20.0                | 6.9  | ----- | 35.0    | 12.5 | ----- | 45.0     | 16.2 | ----- |
| Prostatectomy.....                         | 13                 | 0.0                 | 0.9  | ----- | 0.0     | 2.0  | ----- | 7.7      | 3.5  | ----- |
| Cholecystectomy.....                       | 19                 | 0.0                 | 1.7  | ----- | 0.0     | 2.8  | ----- | 0.0      | 3.6  | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.8  | ----- | 0.0     | 1.8  | ----- | 0.0      | 2.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MCPHERSON HOSPITAL

Medicare Provider Number: 230069

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| DEMOGRAPHICS:                                  |            | COMORBIDITIES:                      |        |
| Average age at admission.....                  | 75.8 years | Cancer.....                         | 6.1 %  |
| Proportion female.....                         | 61.2 %     | Chronic cardiovascular disease..... | 37.0 % |
| ADMISSION SOURCES/TYPES:                       |            | Chronic liver disease.....          | 1.0 %  |
| Referred by personal or HMO physician.....     | 30.1 %     | Chronic renal disease.....          | 3.0 %  |
| Transferred from skilled nursing facility..... | 0.1 %      | Chronic pulmonary disease.....      | 17.4 % |
| Admitted for elective procedure.....           | 11.6 %     | Cerebrovascular degeneration.....   | 4.9 %  |
| Admitted for emergency.....                    | 69.3 %     | Diabetes mellitus.....              | 6.8 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

|                                       |        |                                  |          |
|---------------------------------------|--------|----------------------------------|----------|
| ORIGIN OF MEDICARE PATIENT ADMISSION: |        | MEDICARE AVERAGE LENGTH OF STAY: |          |
| County/City .....                     | 74.4%  | Hospital .....                   | 6.3 Days |
| State .....                           | 22.4%  | State .....                      | 8.5 Days |
| Outside State .....                   | 3.2%   | National .....                   | 8.6 Days |
| Total .....                           | 100.0% |                                  |          |

## HOSPITAL CHARACTERISTICS\*

|                                                             |        |                                          |     |
|-------------------------------------------------------------|--------|------------------------------------------|-----|
| SOURCE: AHA Annual Survey of Hospitals** - Survey Year 1990 |        |                                          |     |
| PROFILE:                                                    |        | SPECIALTY SERVICES:                      |     |
| Total Beds .....                                            | 93     | Burn Unit .....                          | No  |
| Occupancy Rate .....                                        | 47.0 % | Cardiac Intensive Care .....             | No  |
| Ownership/Control.....                                      | Church | Comprehensive Geriatric .....            | No  |
| Medicare Discharges .....                                   | 34.2 % | Hospice Care .....                       | No  |
| Case Mix Index (CMI) .....                                  | 1.1542 | Medical/Surgical Intensive Care.....     | Yes |
| STAFFING:                                                   |        | Organ/Tissue Transplant .....            | No  |
| Total Number of Physicians.....                             | 67     | Other Intensive Care .....               | No  |
| Percent of Physicians Board<br>Certified Specialists .....  | 59.7 % | Trauma Center .....                      | No  |
| Medical Residents/Interns .....                             | 0      | OTHER SPECIALTY/HOSPITAL-BASED SERVICES: |     |
| Registered Nurses.....                                      | 152    | Alcohol/Drug.....                        | Yes |
| Licensed Practical Nurses .....                             | 33     | Rehabilitation.....                      | No  |
|                                                             |        | Psychiatric .....                        | No  |
|                                                             |        | Medicare Swing Beds .....                | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# MECOSTA COUNTY GENERAL HOSPITAL

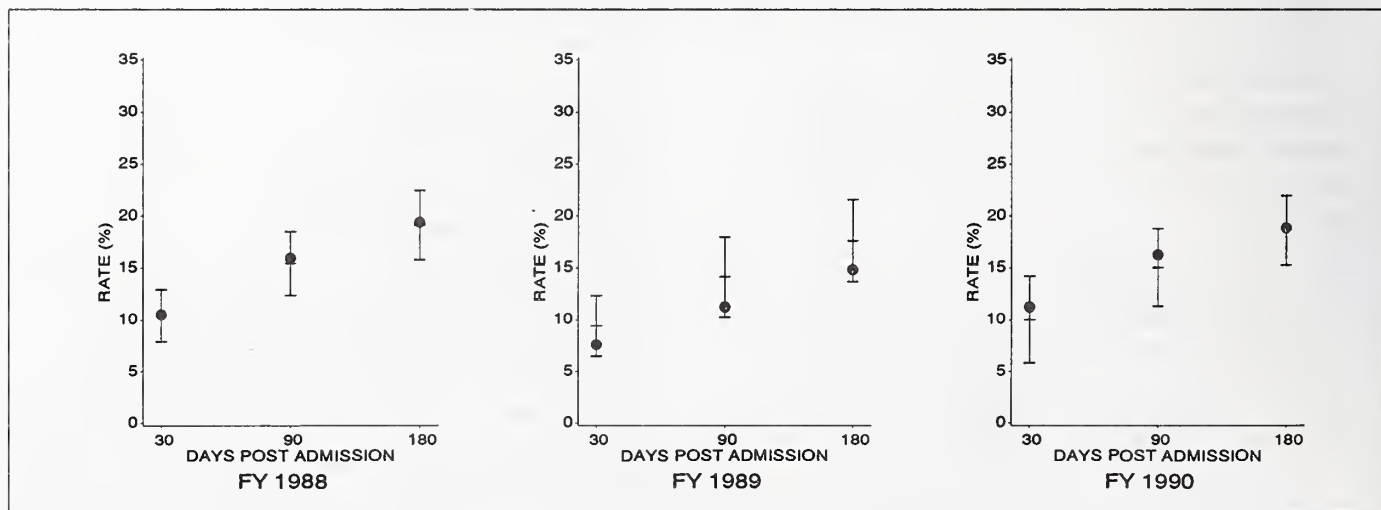
405 WINTER  
BIG RAPIDS, MI 49307  
Medicare Provider Number: 230093

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 580                | 11.2                | 10.0 | 2.1   | 16.2    | 15.0 | 1.9   | 18.8     | 18.6 | 1.7   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 31                 | 32.3                | 22.7 | ----- | 38.7    | 26.5 | ----- | 41.9     | 29.7 | ----- |
| Congestive Heart Failure.....              | 36                 | 19.4                | 14.9 | ----- | 27.8    | 24.0 | ----- | 38.9     | 31.1 | ----- |
| Pneumonia/Influenza.....                   | 40                 | 20.0                | 17.1 | ----- | 22.5    | 23.2 | ----- | 27.5     | 27.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 5                  | 20.0                | 18.2 | ----- | 20.0    | 30.9 | ----- | 20.0     | 39.2 | ----- |
| Transient Cerebral Ischemia.....           | 5                  | 0.0                 | 2.6  | ----- | 0.0     | 5.5  | ----- | 0.0      | 8.5  | ----- |
| Stroke.....                                | 32                 | 21.9                | 15.8 | ----- | 31.3    | 22.3 | ----- | 31.3     | 25.8 | ----- |
| Hip Fracture.....                          | 21                 | 19.0                | 8.8  | ----- | 19.0    | 15.1 | ----- | 23.8     | 19.7 | ----- |
| Sepsis.....                                | 6                  | 50.0                | 28.0 | ----- | 66.7    | 34.7 | ----- | 66.7     | 38.8 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 14                 | 21.4                | 3.6  | ----- | 21.4    | 6.3  | ----- | 28.6     | 8.7  | ----- |
| Open Reduction of Hip Fracture.....        | 12                 | 8.3                 | 9.4  | ----- | 8.3     | 16.8 | ----- | 8.3      | 21.5 | ----- |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 16                 | 0.0                 | 1.9  | ----- | 0.0     | 3.4  | ----- | 0.0      | 4.5  | ----- |
| Hysterectomy.....                          | 5                  | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MECOSTA COUNTY GENERAL HOSPITAL

Medicare Provider Number: 230093

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.5 years  
Proportion female..... 57.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.1 %  
Transferred from skilled nursing facility..... 0.5 %  
Admitted for elective procedure..... 9.8 %  
Admitted for emergency..... 72.4 %

### COMORBIDITIES:

Cancer..... 7.1 %  
Chronic cardiovascular disease..... 45.3 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 1.2 %  
Chronic pulmonary disease..... 20.2 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 7.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 65.5%  
State..... 32.4%  
Outside State..... 2.1%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.5 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 74  
Occupancy Rate..... 36.0 %  
Ownership/Control..... Local Government  
Medicare Discharges..... 34.7 %  
Case Mix Index (CMI)..... 1.1299

### STAFFING:

Total Number of Physicians..... 24  
Percent of Physicians Board  
Certified Specialists..... 62.5 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 78  
Licensed Practical Nurses..... 14

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MEMORIAL HOSPITAL

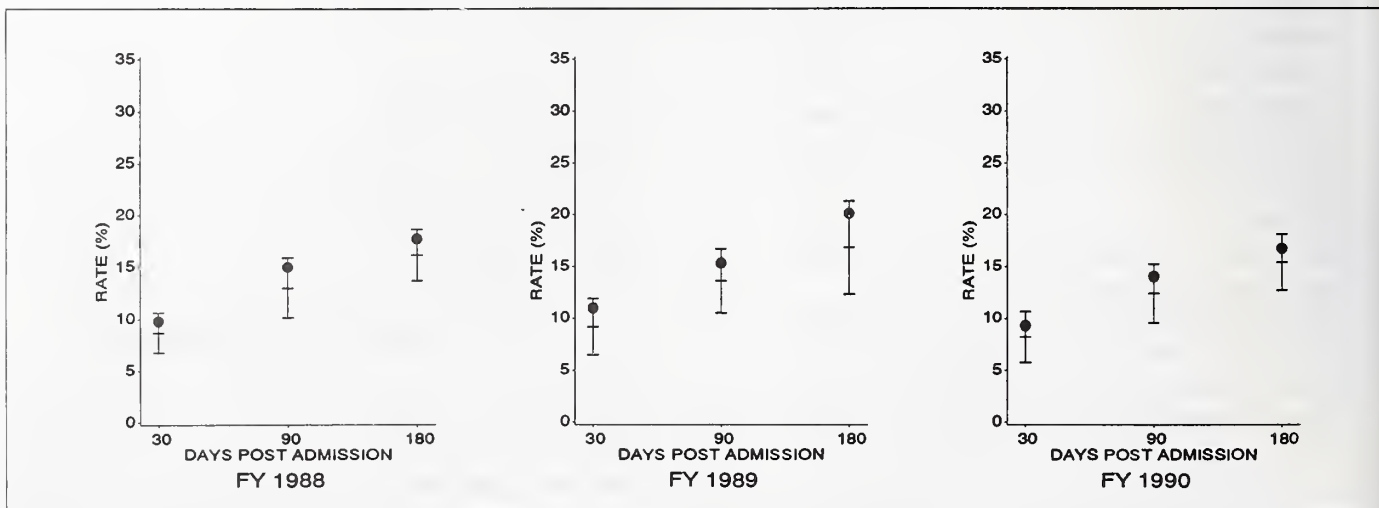
826 WEST KING STREET  
OWOSSO, MI 48867  
Medicare Provider Number: 230121

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1136            | 9.3                 | 8.2  | 1.2   | 14.0    | 12.4 | 1.4   | 16.7     | 15.4 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 35              | 14.3                | 27.5 | ----- | 17.1    | 30.1 | ----- | 20.0     | 32.6 | ----- |
| Congestive Heart Failure.....              | 53              | 24.5                | 14.8 | 10.4  | 35.8    | 23.4 | 13.7  | 43.4     | 30.0 | 14.4  |
| Pneumonia/Influenza.....                   | 51              | 19.6                | 17.8 | 6.7   | 31.4    | 24.0 | 8.8   | 33.3     | 28.2 | 7.7   |
| Chronic Obstructive Pulmonary Disease..... | 15              | 0.0                 | 6.6  | ----- | 13.3    | 12.7 | ----- | 20.0     | 17.6 | ----- |
| Transient Cerebral Ischemia.....           | 23              | 0.0                 | 1.6  | ----- | 4.3     | 3.7  | ----- | 4.3      | 6.1  | ----- |
| Stroke.....                                | 37              | 18.9                | 18.5 | ----- | 27.0    | 26.0 | ----- | 27.0     | 29.8 | ----- |
| Hip Fracture.....                          | 37              | 5.4                 | 6.5  | ----- | 10.8    | 12.0 | ----- | 10.8     | 15.8 | ----- |
| Sepsis.....                                | 5               | 60.0                | 36.0 | ----- | 60.0    | 49.5 | ----- | 80.0     | 55.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 8               | 0.0                 | 2.6  | ----- | 12.5    | 5.4  | ----- | 12.5     | 8.2  | ----- |
| Carotid Endarterectomy.....                | 6               | 0.0                 | 1.2  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.1  | ----- |
| Hip Replacement/Reconstruction.....        | 21              | 0.0                 | 1.7  | ----- | 0.0     | 3.3  | ----- | 0.0      | 4.7  | ----- |
| Open Reduction of Hip Fracture.....        | 22              | 4.5                 | 7.0  | ----- | 9.1     | 13.2 | ----- | 9.1      | 17.6 | ----- |
| Prostatectomy.....                         | 43              | 2.3                 | 0.5  | ----- | 4.7     | 1.1  | ----- | 9.3      | 2.0  | ----- |
| Cholecystectomy.....                       | 31              | 6.5                 | 1.7  | ----- | 9.7     | 3.2  | ----- | 9.7      | 4.5  | ----- |
| Hysterectomy.....                          | 12              | 0.0                 | 0.7  | ----- | 0.0     | 1.6  | ----- | 8.3      | 2.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MEMORIAL HOSPITAL

Medicare Provider Number: 230121

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.3 years  
Proportion female..... 58.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 20.5 %  
Admitted for emergency..... 62.3 %

### COMORBIDITIES:

Cancer..... 5.8 %  
Chronic cardiovascular disease..... 27.9 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 3.5 %  
Chronic pulmonary disease..... 10.0 %  
Cerebrovascular degeneration..... 4.4 %  
Diabetes mellitus..... 7.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 78.3%  
State ..... 20.2%  
Outside State ..... 1.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 155  
Occupancy Rate ..... 52.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 34.0 %  
Case Mix Index (CMI) ..... 1.1621

### STAFFING:

Total Number of Physicians..... 78  
Percent of Physicians Board  
Certified Specialists..... 56.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 128  
Licensed Practical Nurses ..... 25

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# MEMORIAL MEDICAL CENTER OF WEST MICHIGAN

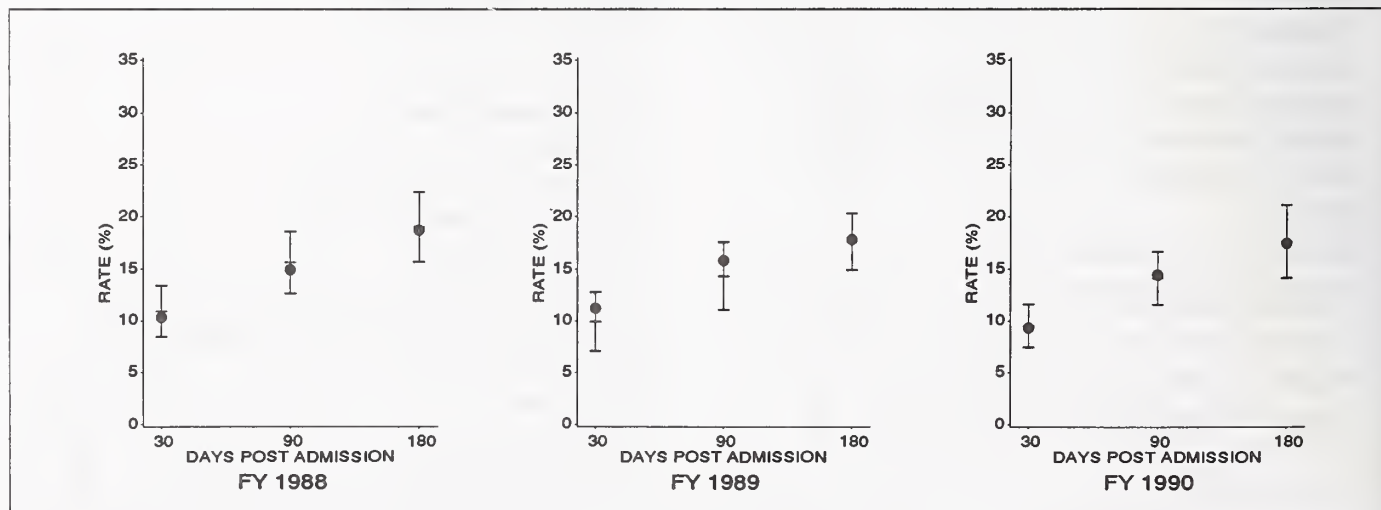
1 ATKINSON DR  
LUDINGTON, MI 49431  
Medicare Provider Number: 230110

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 814             | 9.3                 | 9.5  | 1.1  | 14.4    | 14.1 | 1.3  | 17.4     | 17.6 | 1.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 25              | 12.0                | 30.5 | ---- | 12.0    | 33.9 | ---- | 16.0     | 37.1 | ---- |
| Congestive Heart Failure.....              | 36              | 13.9                | 14.3 | ---- | 25.0    | 22.5 | ---- | 33.3     | 29.1 | ---- |
| Pneumonia/Influenza.....                   | 40              | 17.5                | 13.7 | ---- | 25.0    | 19.0 | ---- | 25.0     | 22.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 20.0                | 5.7  | ---- | 20.0    | 9.9  | ---- | 20.0     | 13.1 | ---- |
| Transient Cerebral Ischemia.....           | 7               | 14.3                | 1.9  | ---- | 14.3    | 4.3  | ---- | 14.3     | 7.3  | ---- |
| Stroke.....                                | 32              | 21.9                | 19.8 | ---- | 31.3    | 26.1 | ---- | 37.5     | 30.2 | ---- |
| Hip Fracture.....                          | 26              | 3.8                 | 4.7  | ---- | 3.8     | 8.9  | ---- | 3.8      | 11.9 | ---- |
| Sepsis.....                                | 6               | 16.7                | 32.8 | ---- | 33.3    | 42.1 | ---- | 33.3     | 47.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 4               | 0.0                 | 2.3  | ---- | 0.0     | 4.1  | ---- | 0.0      | 6.1  | ---- |
| Hip Replacement/Reconstruction.....        | 14              | 0.0                 | 1.7  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.1  | ---- |
| Open Reduction of Hip Fracture.....        | 18              | 5.6                 | 4.7  | ---- | 5.6     | 9.0  | ---- | 5.6      | 12.2 | ---- |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 32              | 0.0                 | 2.0  | ---- | 3.1     | 3.9  | ---- | 3.1      | 5.4  | ---- |
| Hysterectomy.....                          | 5               | 0.0                 | 1.0  | ---- | 0.0     | 2.2  | ---- | 20.0     | 3.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MEMORIAL MEDICAL CENTER OF WEST MICHIGAN

Medicare Provider Number: 230110

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.2 years

Proportion female..... 59.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 95.1 %

Transferred from skilled nursing facility..... 0.4 %

Admitted for elective procedure..... 16.8 %

Admitted for emergency..... 62.0 %

### COMORBIDITIES:

Cancer..... 8.7 %

Chronic cardiovascular disease..... 31.9 %

Chronic liver disease..... 1.2 %

Chronic renal disease..... 3.8 %

Chronic pulmonary disease..... 10.6 %

Cerebrovascular degeneration..... 3.6 %

Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 74.1%

State ..... 22.2%

Outside State ..... 3.7%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.9 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 85

Occupancy Rate ..... 60.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 42.9 %

Case Mix Index (CMI) ..... 1.2520

### STAFFING:

Total Number of Physicians..... 36

Percent of Physicians Board  
Certified Specialists ..... 77.8 %

Medical Residents/Interns ..... 0

Registered Nurses..... 77

Licensed Practical Nurses ..... 29

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

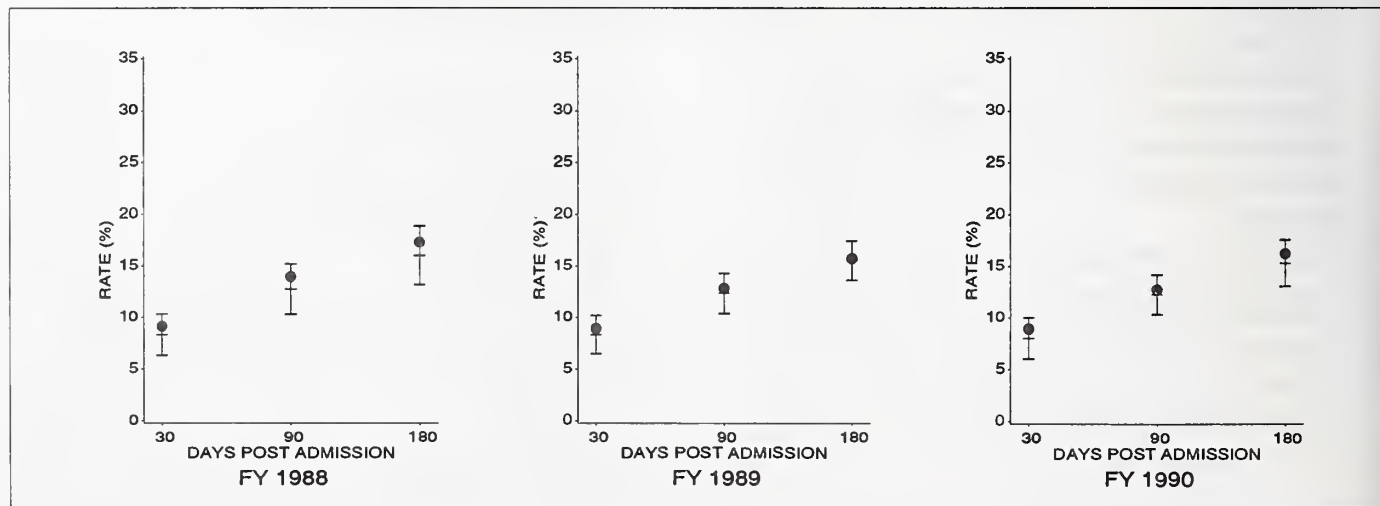
**MERCY HOSPITAL**  
1500 E SHERMAN BOULEVARD  
MUSKEGON, MI 49443  
Medicare Provider Number: 230004

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1858               | 8.9                 | 8.0  | 1.0  | 12.7    | 12.2 | 1.0  | 16.2     | 15.3 | 1.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 88                 | 20.5                | 22.8 | 7.0  | 22.7    | 25.6 | 6.8  | 27.3     | 28.2 | 7.4  |
| Congestive Heart Failure.....              | 113                | 15.9                | 13.7 | 3.9  | 26.5    | 21.0 | 6.6  | 31.9     | 26.5 | 7.9  |
| Pneumonia/Influenza.....                   | 53                 | 24.5                | 15.7 | 10.6 | 30.2    | 21.7 | 12.5 | 35.8     | 26.0 | 13.0 |
| Chronic Obstructive Pulmonary Disease..... | 23                 | 26.1                | 10.8 | ---- | 43.5    | 18.0 | ---- | 47.8     | 23.5 | ---- |
| Transient Cerebral Ischemia.....           | 16                 | 0.0                 | 1.2  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.8  | ---- |
| Stroke.....                                | 60                 | 18.3                | 17.8 | 6.2  | 26.7    | 23.0 | 6.2  | 26.7     | 26.2 | 5.7  |
| Hip Fracture.....                          | 24                 | 0.0                 | 5.9  | ---- | 8.3     | 9.9  | ---- | 8.3      | 12.8 | ---- |
| Sepsis.....                                | 22                 | 22.7                | 20.0 | ---- | 31.8    | 29.6 | ---- | 40.9     | 34.9 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 43                 | 2.3                 | 2.2  | ---- | 2.3     | 2.8  | ---- | 2.3      | 3.5  | ---- |
| Coronary Artery Bypass Graft.....          | 73                 | 12.3                | 4.9  | 5.4  | 13.7    | 7.1  | 5.5  | 15.1     | 8.1  | 5.5  |
| Initial Pacemaker Insertion.....           | 21                 | 4.8                 | 4.2  | ---- | 14.3    | 7.7  | ---- | 14.3     | 10.6 | ---- |
| Carotid Endarterectomy.....                | 13                 | 0.0                 | 1.5  | ---- | 0.0     | 2.7  | ---- | 7.7      | 4.1  | ---- |
| Hip Replacement/Reconstruction.....        | 47                 | 2.1                 | 2.4  | ---- | 2.1     | 4.3  | ---- | 4.3      | 5.7  | ---- |
| Open Reduction of Hip Fracture.....        | 9                  | 0.0                 | 3.5  | ---- | 11.1    | 6.3  | ---- | 11.1     | 8.5  | ---- |
| Prostatectomy.....                         | 65                 | 0.0                 | 0.7  | 1.2  | 0.0     | 1.6  | 2.1  | 0.0      | 2.8  | 3.1  |
| Cholecystectomy.....                       | 48                 | 0.0                 | 2.3  | ---- | 2.1     | 3.9  | ---- | 2.1      | 5.1  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.1  | ---- | 0.0     | 0.3  | ---- | 0.0      | 0.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**MERCY HOSPITAL**  
Medicare Provider Number: 230004

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 72.1 years  
Proportion female..... 50.1 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 51.3 %  
Transferred from skilled nursing facility..... 0.8 %  
Admitted for elective procedure..... 32.3 %  
Admitted for emergency..... 42.3 %

**COMORBIDITIES:**

Cancer..... 7.3 %  
Chronic cardiovascular disease..... 34.8 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 6.4 %  
Chronic pulmonary disease..... 14.3 %  
Cerebrovascular degeneration..... 1.9 %  
Diabetes mellitus..... 9.8 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 74.9%  
State ..... 23.3%  
Outside State ..... 1.8%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 217  
Occupancy Rate ..... 60.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 49.5 %  
Case Mix Index (CMI) ..... 1.6150

**STAFFING:**

Total Number of Physicians..... 147  
Percent of Physicians Board  
Certified Specialists..... 72.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 165  
Licensed Practical Nurses..... 56

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

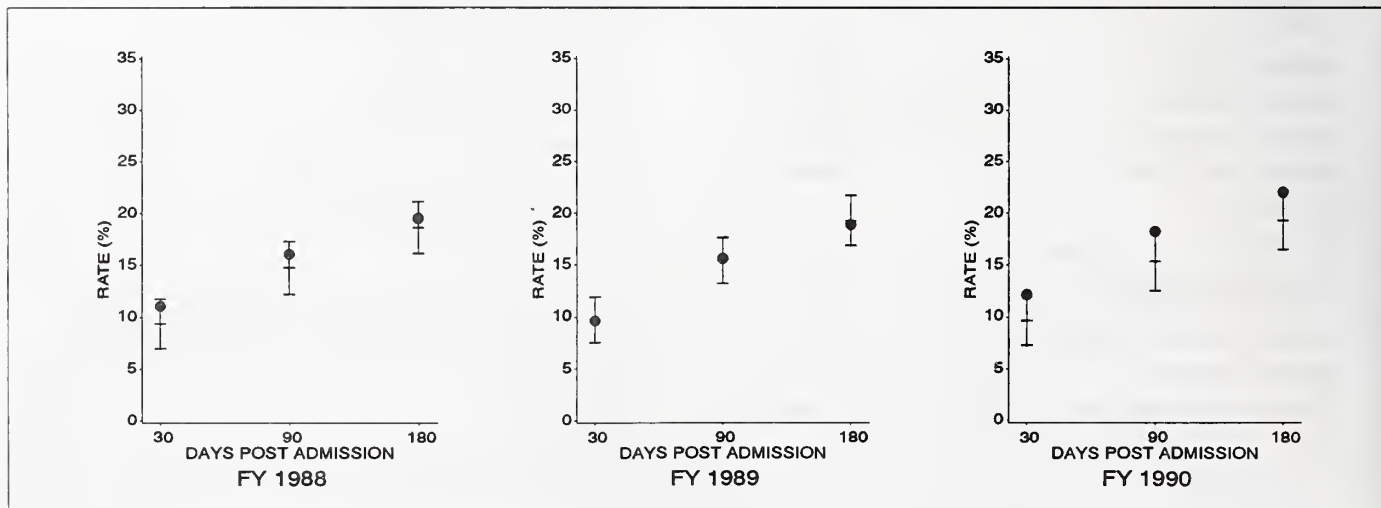
**MERCY HOSPITAL**  
2601 ELECTRIC AVENUE  
PORT HURON, MI 48060  
Medicare Provider Number: 230031

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1272               | 12.1                | 9.6  | 1.2  | 18.2    | 15.3 | 1.4  | 22.0     | 19.3 | 1.4  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 47                 | 31.9                | 19.8 | ---- | 34.0    | 22.8 | ---- | 36.2     | 25.6 | ---- |
| Congestive Heart Failure.....              | 53                 | 20.8                | 13.3 | 8.2  | 30.2    | 21.5 | 10.0 | 41.5     | 27.8 | 10.8 |
| Pneumonia/Influenza.....                   | 59                 | 15.3                | 14.9 | 5.2  | 27.1    | 21.0 | 7.7  | 27.1     | 24.9 | 7.5  |
| Chronic Obstructive Pulmonary Disease..... | 14                 | 7.1                 | 7.0  | ---- | 14.3    | 12.3 | ---- | 21.4     | 17.0 | ---- |
| Transient Cerebral Ischemia.....           | 25                 | 0.0                 | 1.7  | ---- | 4.0     | 3.6  | ---- | 8.0      | 5.7  | ---- |
| Stroke.....                                | 43                 | 18.6                | 17.4 | ---- | 23.3    | 23.4 | ---- | 25.6     | 27.3 | ---- |
| Hip Fracture.....                          | 23                 | 8.7                 | 8.0  | ---- | 26.1    | 13.3 | ---- | 39.1     | 16.5 | ---- |
| Sepsis.....                                | 15                 | 33.3                | 31.5 | ---- | 46.7    | 41.4 | ---- | 53.3     | 46.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 10                 | 0.0                 | 2.1  | ---- | 0.0     | 4.2  | ---- | 0.0      | 6.3  | ---- |
| Carotid Endarterectomy.....                | 59                 | 0.0                 | 1.9  | 2.4  | 1.7     | 3.5  | 3.4  | 1.7      | 4.9  | 4.5  |
| Hip Replacement/Reconstruction.....        | 19                 | 5.3                 | 3.3  | ---- | 21.1    | 6.7  | ---- | 21.1     | 9.1  | ---- |
| Open Reduction of Hip Fracture.....        | 11                 | 9.1                 | 10.0 | ---- | 27.3    | 16.8 | ---- | 45.5     | 20.8 | ---- |
| Prostatectomy.....                         | 40                 | 2.5                 | 1.1  | ---- | 2.5     | 2.8  | ---- | 10.0     | 5.0  | ---- |
| Cholecystectomy.....                       | 17                 | 0.0                 | 4.6  | ---- | 5.9     | 7.0  | ---- | 5.9      | 8.3  | ---- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.9  | ---- | 0.0     | 2.1  | ---- | 0.0      | 3.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**MERCY HOSPITAL**  
Medicare Provider Number: 230031

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 74.8 years  
Proportion female..... 53.9 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 37.5 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 19.7 %  
Admitted for emergency..... 19.8 %

**COMORBIDITIES:**

Cancer..... 14.7 %  
Chronic cardiovascular disease..... 39.5 %  
Chronic liver disease..... 1.3 %  
Chronic renal disease..... 4.5 %  
Chronic pulmonary disease..... 18.3 %  
Cerebrovascular degeneration..... 2.0 %  
Diabetes mellitus..... 8.1 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 76.3%  
State ..... 21.3%  
Outside State ..... 2.4%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 8.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 119  
Occupancy Rate ..... 63.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 56.7 %  
Case Mix Index (CMI) ..... 1.3395

**STAFFING:**

Total Number of Physicians..... 96  
Percent of Physicians Board  
Certified Specialists..... 76.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 104  
Licensed Practical Nurses..... 19

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

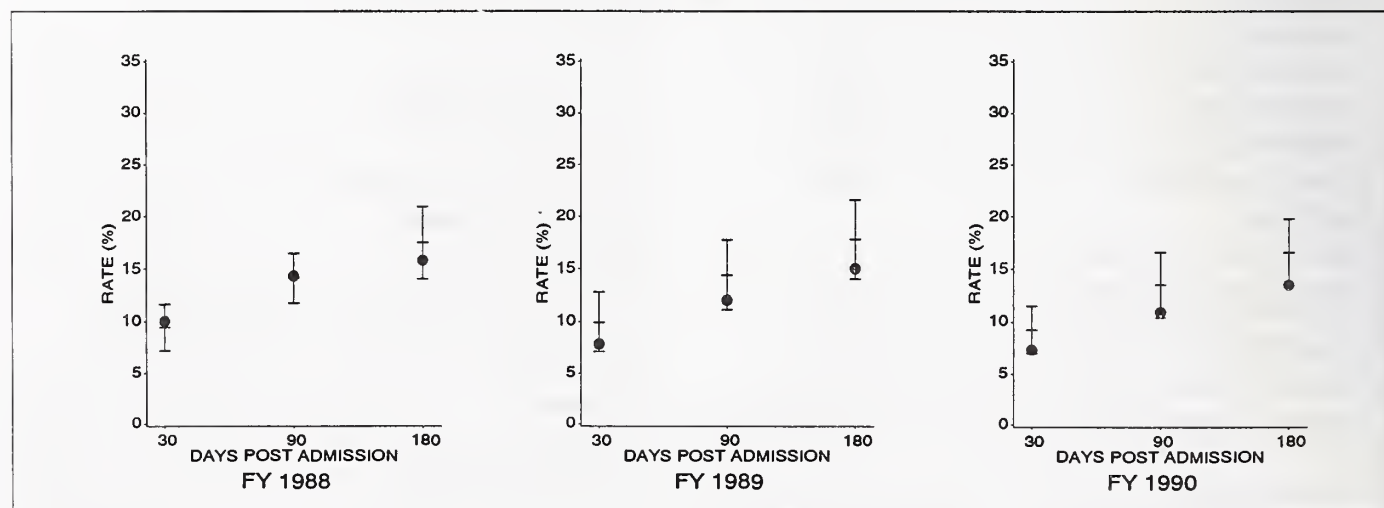
**MERCY HOSPITAL**  
1100 MICHIGAN AVE  
GRAYLING, MI 49738  
Medicare Provider Number: 230058

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 899             | 7.3                 | 9.2  | 1.1   | 10.9    | 13.5 | 1.6   | 13.5     | 16.6 | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 26              | 3.8                 | 18.8 | ----- | 11.5    | 20.9 | ----- | 11.5     | 23.2 | ----- |
| Congestive Heart Failure.....              | 58              | 12.1                | 13.6 | 5.1   | 20.7    | 21.9 | 5.8   | 22.4     | 28.3 | 7.8   |
| Pneumonia/Influenza.....                   | 79              | 12.7                | 15.2 | 4.2   | 15.2    | 20.5 | 5.2   | 17.7     | 24.4 | 5.6   |
| Chronic Obstructive Pulmonary Disease..... | 26              | 11.5                | 7.9  | ----- | 11.5    | 13.8 | ----- | 19.2     | 17.9 | ----- |
| Transient Cerebral Ischemia.....           | 12              | 0.0                 | 1.6  | ----- | 0.0     | 3.9  | ----- | 0.0      | 6.4  | ----- |
| Stroke.....                                | 35              | 20.0                | 16.3 | ----- | 22.9    | 22.8 | ----- | 22.9     | 26.5 | ----- |
| Hip Fracture.....                          | 23              | 0.0                 | 8.4  | ----- | 4.3     | 14.2 | ----- | 4.3      | 17.5 | ----- |
| Sepsis.....                                | 19              | 36.8                | 31.4 | ----- | 47.4    | 38.5 | ----- | 57.9     | 42.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 5               | 0.0                 | 1.1  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.9  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 9               | 0.0                 | 5.8  | ----- | 11.1    | 10.9 | ----- | 11.1     | 14.0 | ----- |
| Open Reduction of Hip Fracture.....        | 14              | 0.0                 | 7.7  | ----- | 7.1     | 13.6 | ----- | 7.1      | 17.2 | ----- |
| Prostatectomy.....                         | 2               | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 2.3  | ----- |
| Cholecystectomy.....                       | 31              | 0.0                 | 2.0  | ----- | 0.0     | 3.4  | ----- | 0.0      | 4.3  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.5  | ----- | 0.0     | 1.1  | ----- | 0.0      | 1.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**MERCY HOSPITAL**  
Medicare Provider Number: 230058

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 74.8 years  
Proportion female..... 54.9 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 26.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 15.8 %  
Admitted for emergency..... 72.0 %

**COMORBIDITIES:**

Cancer..... 5.0 %  
Chronic cardiovascular disease..... 38.9 %  
Chronic liver disease..... 0.2 %  
Chronic renal disease..... 4.0 %  
Chronic pulmonary disease..... 23.1 %  
Cerebrovascular degeneration..... 3.4 %  
Diabetes mellitus..... 7.9 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 25.3%  
State ..... 72.0%  
Outside State ..... 2.7%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 5.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 98  
Occupancy Rate ..... 75.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 49.1 %  
Case Mix Index (CMI) ..... 1.1086

**STAFFING:**

Total Number of Physicians..... 28  
Percent of Physicians Board  
Certified Specialists..... 67.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 66  
Licensed Practical Nurses ..... 26

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

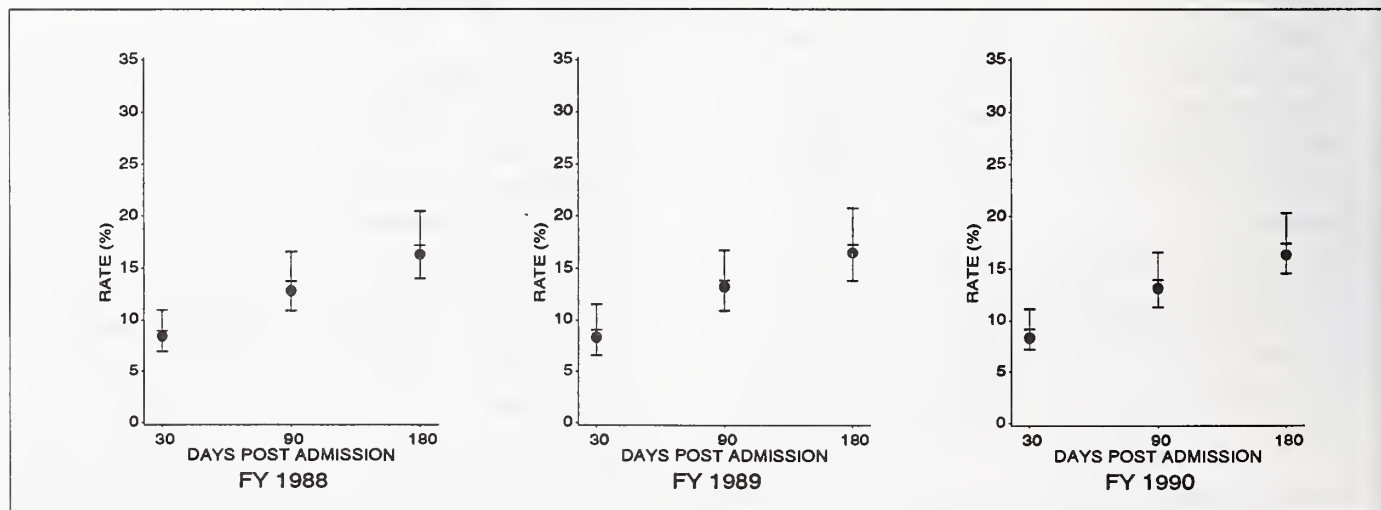
**MERCY HOSPITAL**  
400 HOBART  
CADILLAC, MI 49601  
Medicare Provider Number: 230081

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1156               | 8.3                 | 9.1  | 1.0   | 13.1    | 13.9 | 1.3   | 16.3     | 17.4 | 1.4   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 46                 | 17.4                | 25.1 | ----- | 19.6    | 27.7 | ----- | 19.6     | 30.4 | ----- |
| Congestive Heart Failure.....              | 74                 | 18.9                | 13.8 | 6.2   | 32.4    | 22.4 | 8.7   | 41.9     | 28.7 | 9.3   |
| Pneumonia/Influenza.....                   | 80                 | 12.5                | 15.5 | 6.4   | 17.5    | 21.1 | 5.7   | 21.2     | 25.0 | 5.8   |
| Chronic Obstructive Pulmonary Disease..... | 15                 | 6.7                 | 6.9  | ----- | 13.3    | 12.3 | ----- | 20.0     | 17.1 | ----- |
| Transient Cerebral Ischemia.....           | 14                 | 0.0                 | 2.7  | ----- | 0.0     | 5.9  | ----- | 0.0      | 9.3  | ----- |
| Stroke.....                                | 49                 | 18.4                | 17.2 | ----- | 22.4    | 23.4 | ----- | 24.5     | 27.3 | ----- |
| Hip Fracture.....                          | 34                 | 5.9                 | 6.8  | ----- | 8.8     | 12.0 | ----- | 8.8      | 15.5 | ----- |
| Sepsis.....                                | 4                  | 50.0                | 37.8 | ----- | 50.0    | 51.4 | ----- | 50.0     | 56.3 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 8                  | 0.0                 | 2.5  | ----- | 12.5    | 4.9  | ----- | 12.5     | 7.7  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 12                 | 0.0                 | 3.4  | ----- | 0.0     | 6.2  | ----- | 0.0      | 7.9  | ----- |
| Open Reduction of Hip Fracture.....        | 28                 | 7.1                 | 5.6  | ----- | 10.7    | 10.4 | ----- | 10.7     | 14.2 | ----- |
| Prostatectomy.....                         | 38                 | 2.6                 | 0.8  | ----- | 2.6     | 1.7  | ----- | 2.6      | 2.8  | ----- |
| Cholecystectomy.....                       | 28                 | 3.6                 | 3.6  | ----- | 7.1     | 6.6  | ----- | 7.1      | 8.6  | ----- |
| Hysterectomy.....                          | 12                 | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**MERCY HOSPITAL**  
Medicare Provider Number: 230081

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 74.9 years  
Proportion female..... 52.0 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 40.1 %  
Transferred from skilled nursing facility..... 1.3 %  
Admitted for elective procedure..... 14.4 %  
Admitted for emergency..... 56.1 %

**COMORBIDITIES:**

Cancer..... 6.0 %  
Chronic cardiovascular disease..... 48.6 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 3.5 %  
Chronic pulmonary disease..... 21.0 %  
Cerebrovascular degeneration..... 4.0 %  
Diabetes mellitus..... 11.3 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 46.7%  
State ..... 51.7%  
Outside State ..... 1.6%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 5.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 154  
Occupancy Rate ..... 40.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 36.8 %  
Case Mix Index (CMI) ..... 1.1689

**STAFFING:**

Total Number of Physicians..... 42  
Percent of Physicians Board  
Certified Specialists..... 78.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 134  
Licensed Practical Nurses ..... 68

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

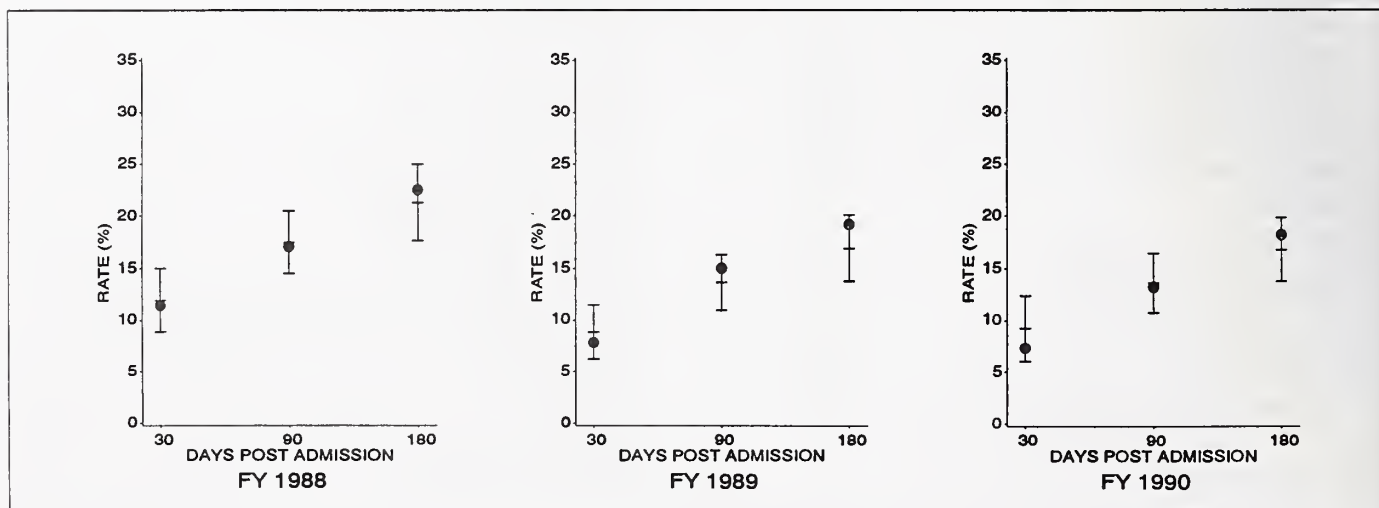
**MERCY HOSPITAL**  
5555 CONNER AVENUE  
DETROIT, MI 48213  
Medicare Provider Number: 230147

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 675                | 7.3                 | 9.2  | 1.6   | 13.2    | 13.6 | 1.4   | 18.2     | 16.8 | 1.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 9                  | 33.3                | 21.1 | ----- | 33.3    | 23.7 | ----- | 44.4     | 25.9 | ----- |
| Congestive Heart Failure.....              | 52                 | 5.8                 | 13.3 | 6.5   | 21.2    | 21.5 | 5.9   | 34.6     | 27.7 | 8.5   |
| Pneumonia/Influenza.....                   | 24                 | 12.5                | 19.6 | ----- | 20.8    | 26.3 | ----- | 25.0     | 30.4 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 10                 | 10.0                | 10.8 | ----- | 10.0    | 18.1 | ----- | 10.0     | 23.3 | ----- |
| Transient Cerebral Ischemia.....           | 15                 | 0.0                 | 1.2  | ----- | 0.0     | 2.7  | ----- | 0.0      | 4.4  | ----- |
| Stroke.....                                | 37                 | 13.5                | 15.3 | ----- | 24.3    | 21.4 | ----- | 27.0     | 24.6 | ----- |
| Hip Fracture.....                          | 5                  | 20.0                | 15.0 | ----- | 60.0    | 27.2 | ----- | 60.0     | 34.8 | ----- |
| Sepsis.....                                | 22                 | 36.4                | 30.1 | ----- | 50.0    | 38.7 | ----- | 59.1     | 42.9 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 5                  | 0.0                 | 3.0  | ----- | 0.0     | 5.7  | ----- | 0.0      | 8.1  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 1                  | 0.0                 | 2.3  | ----- | 0.0     | 4.5  | ----- | 0.0      | 6.1  | ----- |
| Open Reduction of Hip Fracture.....        | 4                  | 25.0                | 16.5 | ----- | 75.0    | 31.0 | ----- | 75.0     | 40.3 | ----- |
| Prostatectomy.....                         | 21                 | 0.0                 | 1.5  | ----- | 4.8     | 3.3  | ----- | 9.5      | 5.5  | ----- |
| Cholecystectomy.....                       | 5                  | 0.0                 | 0.6  | ----- | 0.0     | 1.3  | ----- | 0.0      | 1.9  | ----- |
| Hysterectomy.....                          | 1                  | 0.0                 | 0.1  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**MERCY HOSPITAL**  
Medicare Provider Number: 230147

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 66.8 years  
Proportion female..... 45.9 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 16.4 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 2.2 %  
Admitted for emergency..... 0.6 %

**COMORBIDITIES:**

Cancer..... 4.9 %  
Chronic cardiovascular disease..... 33.3 %  
Chronic liver disease..... 1.8 %  
Chronic renal disease..... 16.1 %  
Chronic pulmonary disease..... 12.3 %  
Cerebrovascular degeneration..... 4.3 %  
Diabetes mellitus..... 11.3 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City..... 95.1 %  
State..... 3.3 %  
Outside State ..... 1.6 %  
Total ..... 100.0 %

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 11.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 375  
Ownership/Control..... Church  
Case Mix Index (CMI) ..... 1.2888

**STAFFING:**

Medical Residents/Interns ..... 54  
Registered Nurses..... 207  
Licensed Practical Nurses ..... 16

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MERCY MEMORIAL MEDICAL CENTER INC

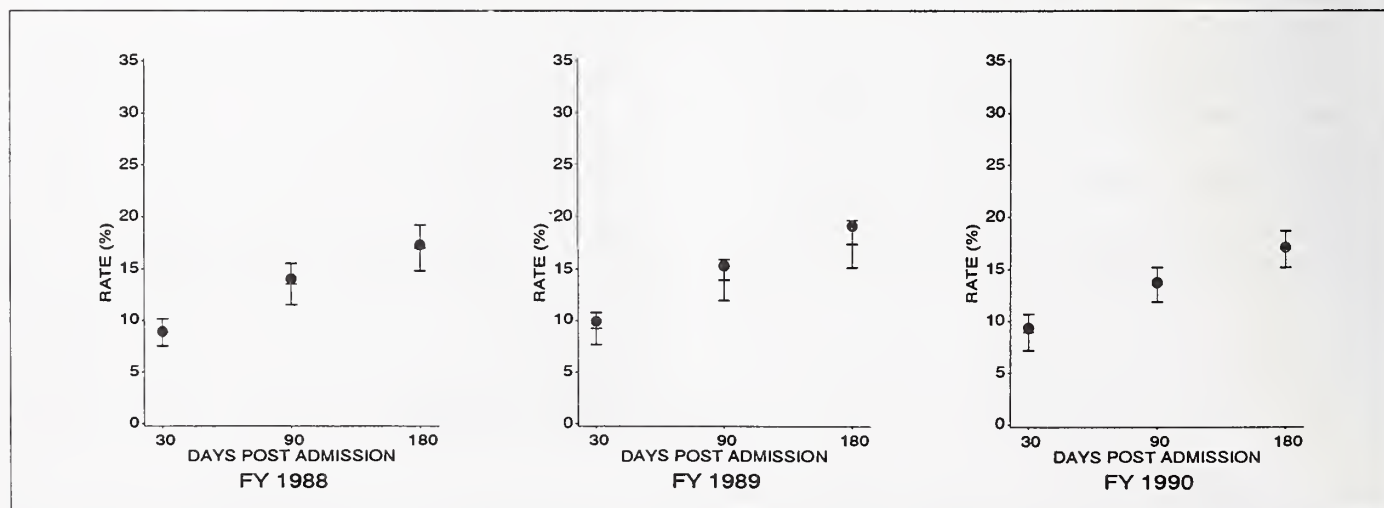
1234 NAPIER AVENUE  
ST JOSEPH, MI 49085  
Medicare Provider Number: 230021

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2412            | 9.3                 | 8.9  | 0.9   | 13.7    | 13.5 | 0.8   | 17.1     | 16.9 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 59              | 16.9                | 21.9 | 6.9   | 16.9    | 24.8 | 7.1   | 18.6     | 27.3 | 7.9   |
| Congestive Heart Failure.....              | 140             | 18.6                | 14.8 | 3.4   | 23.6    | 23.3 | 3.6   | 27.9     | 29.7 | 4.0   |
| Pneumonia/Influenza.....                   | 87              | 16.1                | 15.8 | 4.0   | 18.4    | 21.3 | 5.0   | 24.1     | 24.9 | 5.1   |
| Chronic Obstructive Pulmonary Disease..... | 25              | 4.0                 | 8.0  | ----- | 8.0     | 13.7 | ----- | 12.0     | 18.3 | ----- |
| Transient Cerebral Ischemia.....           | 44              | 0.0                 | 1.8  | ----- | 0.0     | 3.8  | ----- | 0.0      | 6.1  | ----- |
| Stroke.....                                | 105             | 27.6                | 20.2 | 4.9   | 37.1    | 26.9 | 5.7   | 41.9     | 30.7 | 6.2   |
| Hip Fracture.....                          | 75              | 12.0                | 5.8  | 4.0   | 20.0    | 10.4 | 6.3   | 25.3     | 13.6 | 6.9   |
| Sepsis.....                                | 39              | 15.4                | 27.2 | ----- | 23.1    | 34.2 | ----- | 30.8     | 38.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 95              | 2.1                 | 2.6  | 2.7   | 2.1     | 3.4  | 3.0   | 3.2      | 4.3  | 3.6   |
| Coronary Artery Bypass Graft.....          | 52              | 7.7                 | 4.2  | 4.9   | 9.6     | 5.8  | 7.1   | 13.5     | 6.6  | 7.3   |
| Initial Pacemaker Insertion.....           | 19              | 0.0                 | 2.0  | ----- | 5.3     | 4.1  | ----- | 5.3      | 6.1  | ----- |
| Carotid Endarterectomy.....                | 11              | 0.0                 | 1.2  | ----- | 0.0     | 2.3  | ----- | 9.1      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 52              | 7.7                 | 2.6  | 4.3   | 7.7     | 4.9  | 5.5   | 9.6      | 6.6  | 5.4   |
| Open Reduction of Hip Fracture.....        | 41              | 4.9                 | 5.0  | ----- | 14.6    | 9.3  | ----- | 22.0     | 12.4 | ----- |
| Prostatectomy.....                         | 77              | 1.3                 | 0.9  | 1.5   | 3.9     | 2.1  | 2.4   | 5.2      | 3.6  | 3.0   |
| Cholecystectomy.....                       | 54              | 3.7                 | 2.7  | 3.5   | 3.7     | 5.4  | 4.7   | 3.7      | 7.6  | 6.1   |
| Hysterectomy.....                          | 12              | 0.0                 | 0.3  | ----- | 8.3     | 0.7  | ----- | 8.3      | 1.1  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MERCY MEMORIAL MEDICAL CENTER INC

Medicare Provider Number: 230021

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.7 years  
Proportion female..... 53.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.7 %  
Transferred from skilled nursing facility..... 0.2 %  
Admitted for elective procedure..... 22.1 %  
Admitted for emergency..... 53.0 %

### COMORBIDITIES:

Cancer..... 8.4 %  
Chronic cardiovascular disease..... 35.8 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 5.4 %  
Chronic pulmonary disease..... 12.6 %  
Cerebrovascular degeneration..... 2.2 %  
Diabetes mellitus..... 9.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 89.7%  
State ..... 8.1%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 309  
Occupancy Rate ..... 54.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.2 %  
Case Mix Index (CMI) ..... 1.4110

### STAFFING:

Total Number of Physicians..... 211  
Percent of Physicians Board  
Certified Specialists ..... 84.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 282  
Licensed Practical Nurses ..... 54

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MERCY-MEMORIAL HOSPITAL

740 N MACOMB STREET, BOX 67  
MONROE, MI 48161

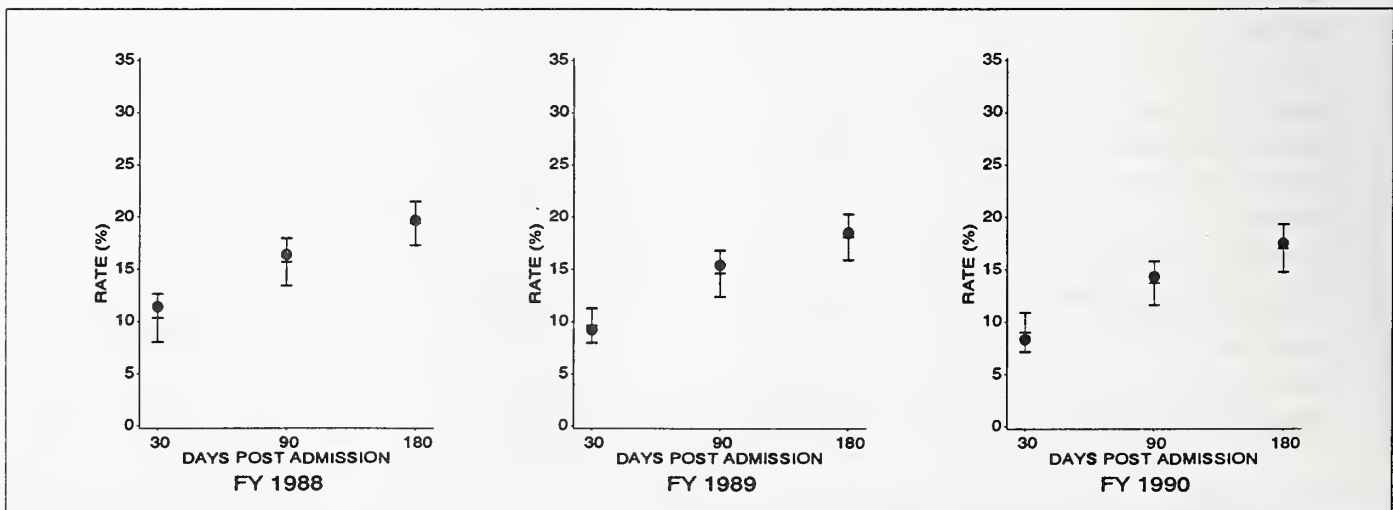
Medicare Provider Number: 230099

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1674            | 8.3                 | 9.0  | 0.9  | 14.3    | 13.7 | 1.1  | 17.5     | 17.0 | 1.1  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 40              | 25.0                | 23.2 | ---- | 35.0    | 26.4 | ---- | 37.5     | 29.1 | ---- |
| Congestive Heart Failure.....              | 122             | 14.8                | 14.2 | 3.7  | 24.6    | 22.6 | 4.3  | 29.5     | 28.5 | 4.6  |
| Pneumonia/Influenza.....                   | 115             | 12.2                | 14.4 | 4.2  | 19.1    | 19.9 | 5.5  | 22.6     | 23.4 | 4.2  |
| Chronic Obstructive Pulmonary Disease..... | 27              | 11.1                | 8.6  | ---- | 14.8    | 14.6 | ---- | 22.2     | 19.3 | ---- |
| Transient Cerebral Ischemia.....           | 41              | 0.0                 | 2.0  | ---- | 0.0     | 4.5  | ---- | 0.0      | 7.3  | ---- |
| Stroke.....                                | 69              | 26.1                | 20.8 | 6.3  | 36.2    | 28.8 | 8.7  | 40.6     | 33.1 | 8.3  |
| Hip Fracture.....                          | 39              | 10.3                | 6.6  | ---- | 12.8    | 11.4 | ---- | 17.9     | 14.7 | ---- |
| Sepsis.....                                | 16              | 31.3                | 23.6 | ---- | 37.5    | 30.7 | ---- | 43.8     | 35.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 23              | 4.3                 | 5.5  | ---- | 21.7    | 10.4 | ---- | 30.4     | 14.3 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 21              | 4.8                 | 3.5  | ---- | 9.5     | 6.4  | ---- | 9.5      | 8.4  | ---- |
| Open Reduction of Hip Fracture.....        | 27              | 7.4                 | 5.7  | ---- | 7.4     | 10.1 | ---- | 11.1     | 13.5 | ---- |
| Prostatectomy.....                         | 47              | 2.1                 | 1.0  | ---- | 6.4     | 2.2  | ---- | 8.5      | 3.8  | ---- |
| Cholecystectomy.....                       | 43              | 4.7                 | 3.4  | ---- | 4.7     | 6.3  | ---- | 7.0      | 8.3  | ---- |
| Hysterectomy.....                          | 17              | 0.0                 | 0.5  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MERCY-MEMORIAL HOSPITAL

Medicare Provider Number: 230099

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.8 years |
| Proportion female.....        | 59.3 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 35.7 % |
| Transferred from skilled nursing facility..... | 2.6 %  |
| Admitted for elective procedure.....           | 9.3 %  |
| Admitted for emergency.....                    | 64.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.6 %  |
| Chronic cardiovascular disease..... | 40.5 % |
| Chronic liver disease.....          | 1.1 %  |
| Chronic renal disease.....          | 3.3 %  |
| Chronic pulmonary disease.....      | 17.0 % |
| Cerebrovascular degeneration.....   | 3.1 %  |
| Diabetes mellitus.....              | 7.7 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 92.3%  |
| State .....         | 6.0%   |
| Outside State ..... | 1.7%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 9.0 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 182                 |
| Occupancy Rate .....       | 75.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 30.1 %              |
| Case Mix Index (CMI) ..... | 1.1520              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 76     |
| Percent of Physicians Board<br>Certified Specialists ..... | 55.3 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 206    |
| Licensed Practical Nurses .....                            | 47     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric.....          | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# METROPOLITAN HOSPITAL

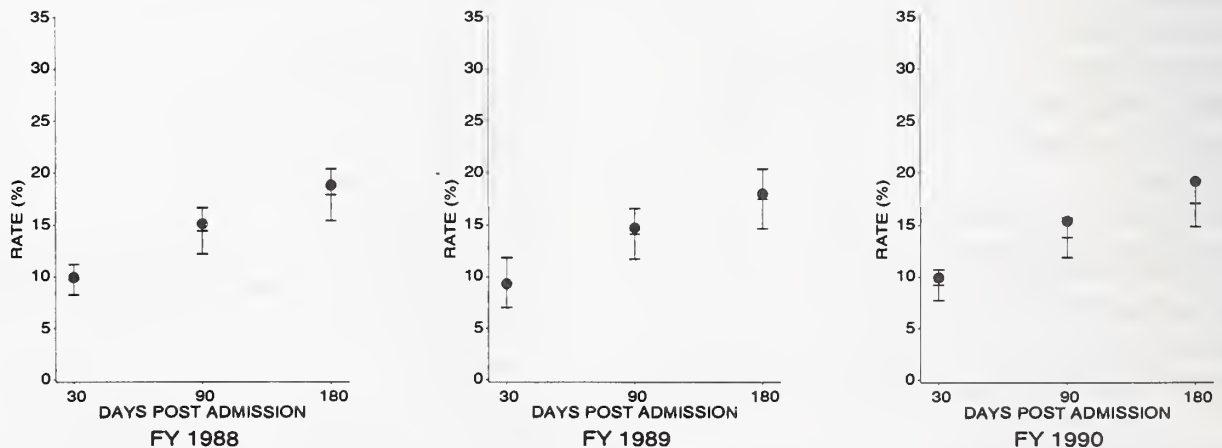
1919 BOSTON S E  
GRAND RAPIDS, MI 49506  
Medicare Provider Number: 230236

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1799            | 9.9                 | 9.2  | 0.7  | 15.4    | 13.8 | 1.0  | 19.2     | 17.1 | 1.1  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 58              | 24.1                | 26.3 | 6.1  | 31.0    | 29.2 | 6.4  | 31.0     | 31.9 | 6.8  |
| Congestive Heart Failure.....              | 84              | 9.5                 | 13.4 | 7.4  | 14.3    | 21.6 | 8.6  | 21.4     | 27.2 | 8.3  |
| Pneumonia/Influenza.....                   | 89              | 16.9                | 14.4 | 4.0  | 23.6    | 19.9 | 5.0  | 25.8     | 23.5 | 4.9  |
| Chronic Obstructive Pulmonary Disease..... | 23              | 4.3                 | 9.8  | ---- | 8.7     | 16.3 | ---- | 13.0     | 20.9 | ---- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.3  | ---- | 13.3    | 3.5  | ---- | 20.0     | 6.3  | ---- |
| Stroke.....                                | 88              | 25.0                | 19.5 | 7.1  | 31.8    | 25.6 | 8.0  | 37.5     | 29.1 | 9.1  |
| Hip Fracture.....                          | 60              | 15.0                | 7.1  | 6.1  | 20.0    | 12.4 | 6.2  | 21.7     | 15.9 | 5.8  |
| Sepsis.....                                | 23              | 21.7                | 27.5 | ---- | 30.4    | 35.2 | ---- | 47.8     | 40.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 14              | 14.3                | 3.7  | ---- | 14.3    | 6.4  | ---- | 14.3     | 8.9  | ---- |
| Carotid Endarterectomy.....                | 12              | 0.0                 | 1.1  | ---- | 0.0     | 2.1  | ---- | 0.0      | 3.1  | ---- |
| Hip Replacement/Reconstruction.....        | 40              | 10.0                | 2.5  | ---- | 10.0    | 4.6  | ---- | 10.0     | 6.0  | ---- |
| Open Reduction of Hip Fracture.....        | 40              | 10.0                | 6.9  | ---- | 17.5    | 12.3 | ---- | 20.0     | 16.0 | ---- |
| Prostatectomy.....                         | 97              | 1.0                 | 0.8  | 1.2  | 1.0     | 1.8  | 1.8  | 2.1      | 3.1  | 2.6  |
| Cholecystectomy.....                       | 46              | 4.3                 | 3.0  | ---- | 10.9    | 6.1  | ---- | 13.0     | 8.6  | ---- |
| Hysterectomy.....                          | 12              | 0.0                 | 1.6  | ---- | 8.3     | 3.3  | ---- | 8.3      | 4.5  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# METROPOLITAN HOSPITAL

Medicare Provider Number: 230236

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.4 years

Proportion female..... 55.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.6 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 35.2 %

Admitted for emergency..... 63.8 %

### COMORBIDITIES:

Cancer..... 6.6 %

Chronic cardiovascular disease..... 37.5 %

Chronic liver disease..... 1.3 %

Chronic renal disease..... 2.7 %

Chronic pulmonary disease..... 20.1 %

Cerebrovascular degeneration..... 4.6 %

Diabetes mellitus..... 7.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 66.1%

State ..... 32.2%

Outside State ..... 1.7%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.0 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 212

Occupancy Rate ..... 59.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges .....(Not Available)

Case Mix Index (CMI) ..... 1.3096

### STAFFING:

Total Number of Physicians..... 135

Percent of Physicians Board  
Certified Specialists..... 51.1 %

Medical Residents/Interns ..... 45

Registered Nurses..... 180

Licensed Practical Nurses ..... 70

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... Yes

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MICHIGAN HEALTH CENTER

2700 MARTIN LUTHER KING JR BLVD

DETROIT, MI 48208

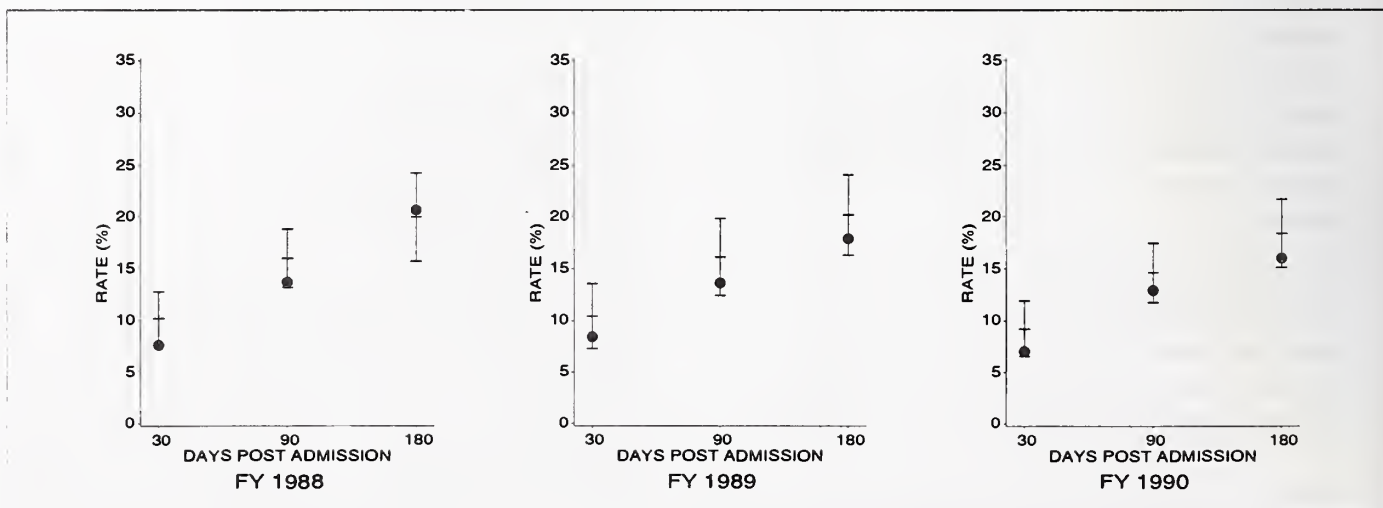
Medicare Provider Number: 230221

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 754             | 7.0                 | 9.2  | 1.3  | 12.9    | 14.6 | 1.4  | 16.0     | 18.4 | 1.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 9               | 11.1                | 26.0 | ---- | 22.2    | 28.8 | ---- | 22.2     | 31.1 | ---- |
| Congestive Heart Failure.....              | 119             | 6.7                 | 12.0 | 3.3  | 7.6     | 19.5 | 4.5  | 10.9     | 25.4 | 5.2  |
| Pneumonia/Influenza.....                   | 43              | 18.6                | 15.4 | ---- | 27.9    | 21.3 | ---- | 34.9     | 24.6 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 13              | 0.0                 | 7.8  | ---- | 15.4    | 12.9 | ---- | 15.4     | 17.0 | ---- |
| Transient Cerebral Ischemia.....           | 11              | 0.0                 | 2.2  | ---- | 9.1     | 4.9  | ---- | 9.1      | 7.6  | ---- |
| Stroke.....                                | 31              | 3.2                 | 16.0 | ---- | 22.6    | 22.7 | ---- | 25.8     | 26.4 | ---- |
| Hip Fracture.....                          | 5               | 0.0                 | 13.9 | ---- | 40.0    | 24.1 | ---- | 60.0     | 30.3 | ---- |
| Sepsis.....                                | 4               | 0.0                 | 26.3 | ---- | 50.0    | 37.6 | ---- | 50.0     | 42.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 4.9  | ---- | 25.0    | 9.8  | ---- | 25.0     | 13.4 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 6               | 0.0                 | 0.8  | ---- | 0.0     | 1.4  | ---- | 0.0      | 2.1  | ---- |
| Open Reduction of Hip Fracture.....        | 2               | 0.0                 | 21.3 | ---- | 100.0   | 35.1 | ---- | 100.0    | 42.1 | ---- |
| Prostatectomy.....                         | 16              | 0.0                 | 0.9  | ---- | 0.0     | 2.3  | ---- | 0.0      | 4.0  | ---- |
| Cholecystectomy.....                       | 6               | 16.7                | 2.6  | ---- | 16.7    | 4.9  | ---- | 16.7     | 6.5  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MICHIGAN HEALTH CENTER

Medicare Provider Number: 230221

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.3 years  
Proportion female..... 55.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 45.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 7.0 %  
Admitted for emergency..... 51.1 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 39.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 4.1 %  
Chronic pulmonary disease..... 23.6 %  
Cerebrovascular degeneration..... 6.1 %  
Diabetes mellitus..... 14.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 97.9%  
State ..... 1.4%  
Outside State ..... 0.7%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 12.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 240  
Occupancy Rate ..... 51.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 21.0 %  
Case Mix Index (CMI) ..... 1.2310

### STAFFING:

Total Number of Physicians..... 140  
Percent of Physicians Board  
Certified Specialists ..... 52.9 %  
Medical Residents/Interns ..... 37  
Registered Nurses..... 57  
Licensed Practical Nurses ..... 34

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MIDMICHIGAN REGIONAL MED CTR-MIDLAND

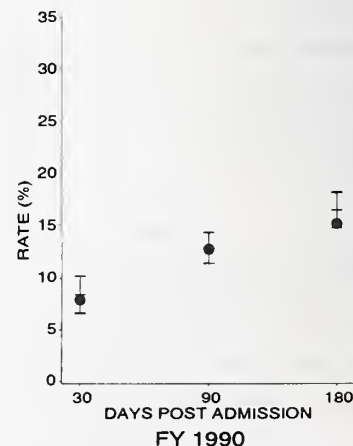
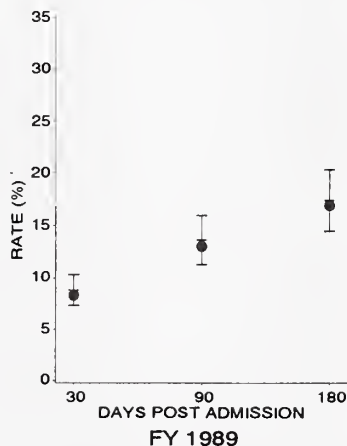
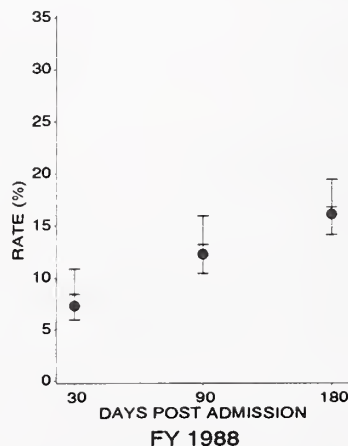
4005 ORCHARD DRIVE  
MIDLAND, MI 48640  
Medicare Provider Number: 230222

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2281            | 7.9                 | 8.4  | 0.9  | 12.8    | 12.9 | 0.7  | 15.2     | 16.5 | 0.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 57              | 26.3                | 27.8 | 6.1  | 29.8    | 30.6 | 6.2  | 31.6     | 33.4 | 6.9  |
| Congestive Heart Failure.....              | 80              | 13.7                | 15.0 | 4.9  | 20.0    | 23.8 | 7.5  | 22.5     | 30.1 | 8.1  |
| Pneumonia/Influenza.....                   | 61              | 18.0                | 17.2 | 5.8  | 19.7    | 23.4 | 6.1  | 21.3     | 27.7 | 7.8  |
| Chronic Obstructive Pulmonary Disease..... | 15              | 0.0                 | 6.4  | ---- | 6.7     | 10.8 | ---- | 6.7      | 14.7 | ---- |
| Transient Cerebral Ischemia.....           | 38              | 2.6                 | 1.7  | ---- | 7.9     | 3.6  | ---- | 10.5     | 5.7  | ---- |
| Stroke.....                                | 94              | 13.8                | 19.9 | 4.8  | 19.1    | 25.9 | 5.6  | 19.1     | 29.6 | 6.4  |
| Hip Fracture.....                          | 74              | 13.5                | 7.0  | 5.3  | 20.3    | 12.4 | 6.5  | 23.0     | 16.3 | 6.1  |
| Sepsis.....                                | 24              | 33.3                | 27.5 | ---- | 37.5    | 33.2 | ---- | 41.7     | 37.9 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 16              | 0.0                 | 2.2  | ---- | 0.0     | 4.2  | ---- | 0.0      | 6.5  | ---- |
| Carotid Endarterectomy.....                | 36              | 0.0                 | 1.3  | ---- | 0.0     | 2.4  | ---- | 0.0      | 3.5  | ---- |
| Hip Replacement/Reconstruction.....        | 72              | 2.8                 | 2.0  | 3.2  | 8.3     | 3.6  | 5.0  | 8.3      | 4.8  | 4.8  |
| Open Reduction of Hip Fracture.....        | 42              | 14.3                | 5.9  | ---- | 21.4    | 10.9 | ---- | 26.2     | 14.8 | ---- |
| Prostatectomy.....                         | 71              | 0.0                 | 0.7  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.9  | ---- |
| Cholecystectomy.....                       | 46              | 0.0                 | 2.6  | ---- | 4.3     | 4.5  | ---- | 6.5      | 5.8  | ---- |
| Hysterectomy.....                          | 22              | 0.0                 | 0.6  | ---- | 0.0     | 1.4  | ---- | 0.0      | 2.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MIDMICHIGAN REGIONAL MED CTR-MIDLAND

Medicare Provider Number: 230222

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.7 years  
Proportion female..... 55.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 48.0 %  
Transferred from skilled nursing facility..... 2.1 %  
Admitted for elective procedure..... 32.4 %  
Admitted for emergency..... 19.5 %

### COMORBIDITIES:

Cancer..... 12.0 %  
Chronic cardiovascular disease..... 36.5 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 15.5 %  
Cerebrovascular degeneration..... 3.9 %  
Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 54.4%  
State ..... 43.6%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 307  
Occupancy Rate ..... 71.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.8 %  
Case Mix Index (CMI) ..... 1.2576

### STAFFING:

Total Number of Physicians..... 132  
Percent of Physicians Board  
Certified Specialists..... 62.9 %  
Medical Residents/Interns ..... 18  
Registered Nurses ..... 251  
Licensed Practical Nurses ..... 99

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# MIDMICHIGAN REGIONAL MEDICAL CTR-CLARE

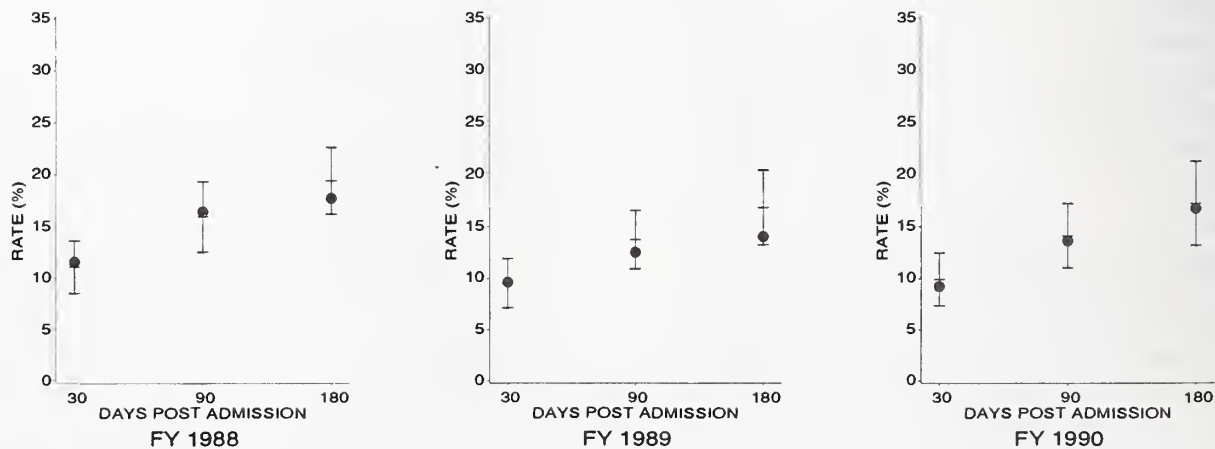
104 WEST SIXTH STREET  
CLARE, MI 48617  
Medicare Provider Number: 230180

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 737                | 9.2                 | 9.9  | 1.3  | 13.6    | 14.1 | 1.5  | 16.7     | 17.2 | 2.0  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 44                 | 29.5                | 31.3 | ---- | 29.5    | 34.3 | ---- | 31.8     | 37.2 | ---- |
| Congestive Heart Failure.....              | 43                 | 14.0                | 12.9 | ---- | 32.6    | 20.9 | ---- | 41.9     | 26.8 | ---- |
| Pneumonia/Influenza.....                   | 92                 | 7.6                 | 12.1 | 6.0  | 12.0    | 16.5 | 6.4  | 14.1     | 19.7 | 6.8  |
| Chronic Obstructive Pulmonary Disease..... | 14                 | 0.0                 | 8.9  | ---- | 0.0     | 15.2 | ---- | 14.3     | 19.9 | ---- |
| Transient Cerebral Ischemia.....           | 15                 | 0.0                 | 1.5  | ---- | 0.0     | 3.5  | ---- | 0.0      | 6.0  | ---- |
| Stroke.....                                | 36                 | 22.2                | 20.4 | ---- | 22.2    | 26.8 | ---- | 30.6     | 31.0 | ---- |
| Hip Fracture.....                          | 0                  |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 6                  | 0.0                 | 15.0 | ---- | 0.0     | 19.5 | ---- | 0.0      | 23.3 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 29                 | 3.4                 | 0.8  | ---- | 6.9     | 2.1  | ---- | 6.9      | 3.8  | ---- |
| Cholecystectomy.....                       | 7                  | 0.0                 | 2.0  | ---- | 0.0     | 3.5  | ---- | 0.0      | 4.6  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.2  | ---- | 0.0     | 0.6  | ---- | 0.0      | 1.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MIDMICHIGAN REGIONAL MEDICAL CTR-CLARE

Medicare Provider Number: 230180

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.8 years  
Proportion female..... 51.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 32.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 8.1 %  
Admitted for emergency..... 8.8 %

### COMORBIDITIES:

Cancer..... 3.5 %  
Chronic cardiovascular disease..... 44.8 %  
Chronic liver disease..... 0.3 %  
Chronic renal disease..... 0.7 %  
Chronic pulmonary disease..... 21.3 %  
Cerebrovascular degeneration..... 4.7 %  
Diabetes mellitus..... 16.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 78.6%  
State ..... 19.4%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 64  
Occupancy Rate ..... 42.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 45.0 %  
Case Mix Index (CMI) ..... 1.1337

### STAFFING:

Total Number of Physicians..... 20  
Percent of Physicians Board  
Certified Specialists..... 50.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 45  
Licensed Practical Nurses..... 37

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MIDMICHIGAN REGIONAL MEDICAL CTR-GLADWIN

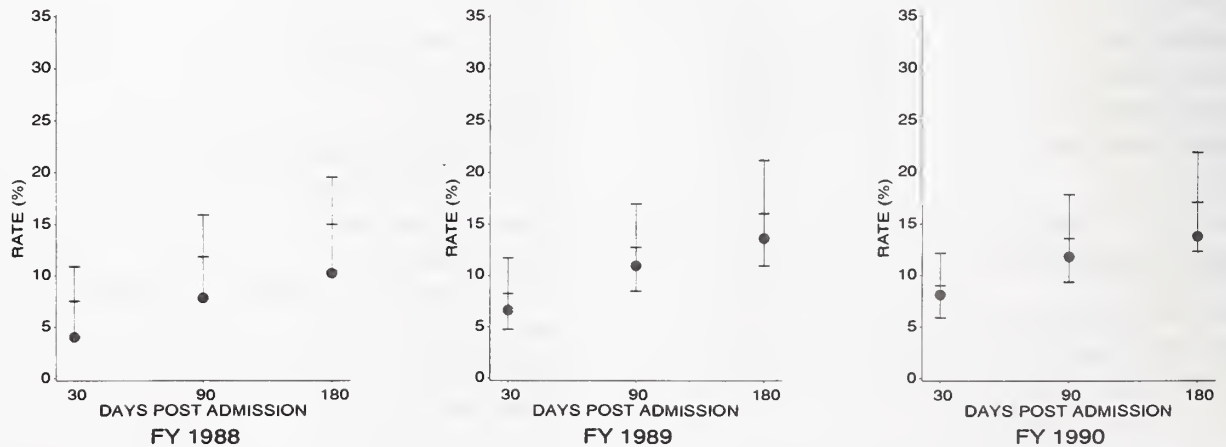
455 QUARTER STREET  
GLADWIN, MI 48624  
Medicare Provider Number: 230189

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 509             | 8.1                 | 9.0  | 1.6  | 11.8    | 13.6 | 2.1  | 13.8     | 17.1 | 2.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 16              | 18.8                | 19.6 | ---- | 18.8    | 22.9 | ---- | 18.8     | 25.7 | ---- |
| Congestive Heart Failure.....              | 26              | 19.2                | 14.1 | ---- | 23.1    | 21.4 | ---- | 30.8     | 27.6 | ---- |
| Pneumonia/Influenza.....                   | 36              | 11.1                | 21.4 | ---- | 16.7    | 28.9 | ---- | 22.2     | 33.1 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 12.5 | ---- | 14.3    | 21.3 | ---- | 28.6     | 29.0 | ---- |
| Transient Cerebral Ischemia.....           | 23              | 4.3                 | 1.8  | ---- | 4.3     | 4.2  | ---- | 4.3      | 6.8  | ---- |
| Stroke.....                                | 12              | 16.7                | 20.3 | ---- | 25.0    | 29.1 | ---- | 25.0     | 33.6 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 6               | 50.0                | 31.2 | ---- | 66.7    | 42.3 | ---- | 66.7     | 49.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 2               | 0.0                 | 1.3  | ---- | 0.0     | 2.4  | ---- | 0.0      | 3.2  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MIDMICHIGAN REGIONAL MEDICAL CTR-GLADWIN

Medicare Provider Number: 230189

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.5 years  
Proportion female..... 59.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 23.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 2.0 %  
Admitted for emergency..... 70.2 %

### COMORBIDITIES:

Cancer..... 4.5 %  
Chronic cardiovascular disease..... 48.2 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 3.9 %  
Chronic pulmonary disease..... 21.2 %  
Cerebrovascular degeneration..... 3.1 %  
Diabetes mellitus..... 9.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.9%  
State ..... 22.0%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 42  
Occupancy Rate ..... 50.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 66.1 %  
Case Mix Index (CMI) ..... 0.9464

### STAFFING:

Total Number of Physicians..... 10  
Percent of Physicians Board  
Certified Specialists..... 40.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 19  
Licensed Practical Nurses..... 19

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MONSIGNOR CLEMENT KERN HOSPITAL

21230 DEQUINDRE ROAD  
WARREN, MI 48091  
Medicare Provider Number: 230264

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 52                 | 0.0                 | 0.7  | 2.1 | 0.0     | 1.6  | 3.9 | 1.9      | 2.6  | 4.0 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Congestive Heart Failure.....              | 0                  |                     |      |     |         |      |     |          |      |     |
| Pneumonia/Influenza.....                   | 0                  |                     |      |     |         |      |     |          |      |     |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |     |         |      |     |          |      |     |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Stroke.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Fracture.....                          | 0                  |                     |      |     |         |      |     |          |      |     |
| Sepsis.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 0                  |                     |      |     |         |      |     |          |      |     |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |     |         |      |     |          |      |     |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Carotid Endarterectomy.....                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Prostatectomy.....                         | 0                  |                     |      |     |         |      |     |          |      |     |
| Cholecystectomy.....                       | 0                  |                     |      |     |         |      |     |          |      |     |
| Hysterectomy.....                          | 0                  |                     |      |     |         |      |     |          |      |     |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# MONSIGNOR CLEMENT KERN HOSPITAL

Medicare Provider Number: 230264

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 60.2 years

Proportion female..... 51.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 94.2 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 96.2 %

Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 0.0 %

Chronic cardiovascular disease..... 17.3 %

Chronic liver disease..... 5.8 %

Chronic renal disease..... 0.0 %

Chronic pulmonary disease..... 7.7 %

Cerebrovascular degeneration..... 3.8 %

Diabetes mellitus..... 17.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 13.3%

State..... 86.7%

Outside State..... 0.0%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 6.0 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 45

Occupancy Rate..... 42.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges..... 50.7 %

Case Mix Index (CMI)..... 1.1695

### STAFFING:

Total Number of Physicians..... 65

Percent of Physicians Board  
Certified Specialists.....(Not Available)

Medical Residents/Interns..... 10

Registered Nurses..... 25

Licensed Practical Nurses..... 2

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... No

Hospice Care..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MORENCI AREA HOSPITAL

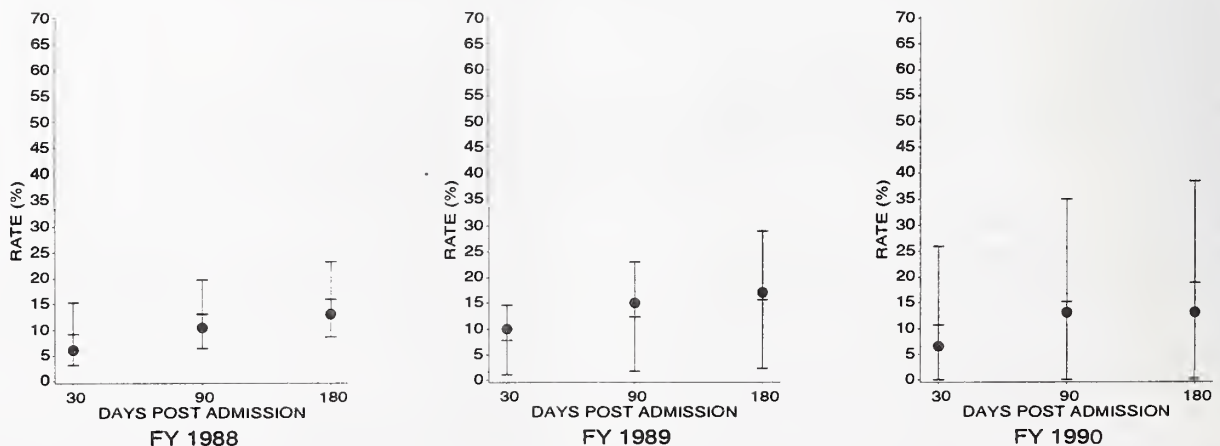
13101 SIMS HIGHWAY  
MORENCI, MI 49256  
Medicare Provider Number: 230113

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 61              | 6.6                 | 10.7 | 7.6   | 13.1    | 15.2 | 9.9   | 13.1     | 18.8 | 9.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 2               | 50.0                | 25.3 | ----- | 50.0    | 28.1 | ----- | 50.0     | 31.9 | ----- |
| Congestive Heart Failure.....              | 4               | 0.0                 | 15.1 | ----- | 25.0    | 23.5 | ----- | 25.0     | 29.9 | ----- |
| Pneumonia/Influenza.....                   | 15              | 13.3                | 13.9 | ----- | 13.3    | 18.2 | ----- | 13.3     | 21.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 1               | 0.0                 | 4.4  | ----- | 0.0     | 7.3  | ----- | 0.0      | 9.0  | ----- |
| Transient Cerebral Ischemia.....           | 1               | 100.0               | 2.7  | ----- | 100.0   | 5.4  | ----- | 100.0    | 8.1  | ----- |
| Stroke.....                                | 2               | 0.0                 | 27.4 | ----- | 0.0     | 33.6 | ----- | 0.0      | 37.1 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 1               | 0.0                 | 0.5  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.2  | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MORENCI AREA HOSPITAL

Medicare Provider Number: 230113

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.6 years

Proportion female..... 47.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.7 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 1.6 %

Admitted for emergency..... 62.3 %

### COMORBIDITIES:

Cancer..... 8.2 %

Chronic cardiovascular disease..... 45.9 %

Chronic liver disease..... 0.0 %

Chronic renal disease..... 1.6 %

Chronic pulmonary disease..... 23.0 %

Cerebrovascular degeneration..... 0.0 %

Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 59.1%

State ..... 14.8%

Outside State ..... 26.1%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 18

Occupancy Rate ..... 14.3 %

Ownership/Control..... Local Government

Medicare Discharges ..... 35.8 %

Case Mix Index (CMI) ..... 0.9620

### STAFFING:

Total Number of Physicians..... 4

Percent of Physicians Board  
Certified Specialists..... 100.0 %

Medical Residents/Interns ..... 0

Registered Nurses..... 9

Licensed Practical Nurses..... 9

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... Yes

Medical/Surgical Intensive Care ..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# MT CARMEL MERCY HOSPITAL & MED CENTER

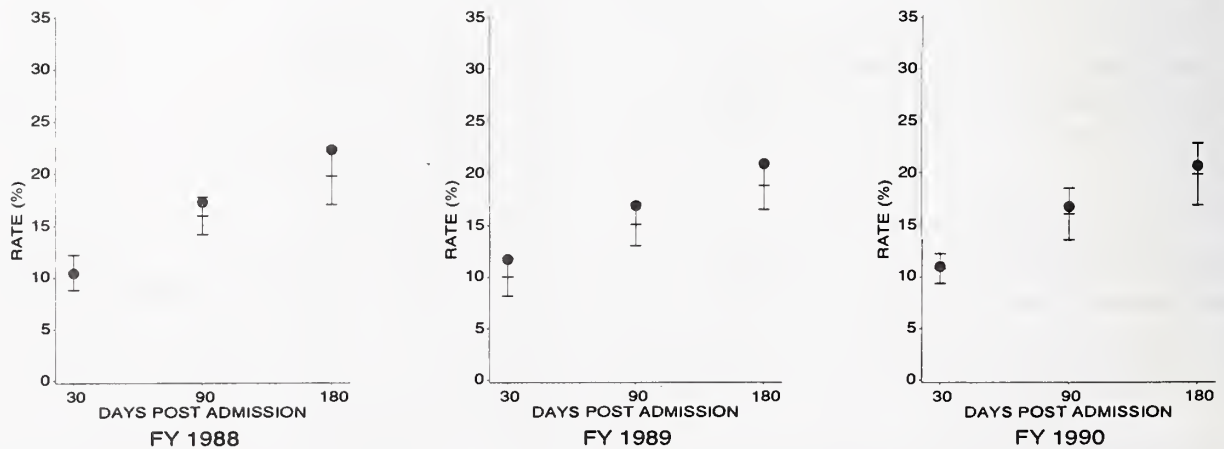
6071 W OUTER DR  
DETROIT, MI 48235  
Medicare Provider Number: 230039

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2218               | 11.0                | 10.8 | 0.7   | 16.8    | 16.1 | 1.2   | 20.7     | 19.9 | 1.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 55                 | 25.5                | 26.9 | 6.0   | 30.9    | 29.7 | 6.5   | 34.5     | 32.4 | 6.4   |
| Congestive Heart Failure.....              | 161                | 8.7                 | 12.9 | 3.7   | 11.8    | 20.9 | 5.0   | 16.8     | 26.7 | 5.5   |
| Pneumonia/Influenza.....                   | 96                 | 15.6                | 18.3 | 4.2   | 24.0    | 24.7 | 5.8   | 31.3     | 28.7 | 5.8   |
| Chronic Obstructive Pulmonary Disease..... | 20                 | 20.0                | 14.7 | ----- | 25.0    | 23.6 | ----- | 25.0     | 29.7 | ----- |
| Transient Cerebral Ischemia.....           | 38                 | 0.0                 | 1.8  | ----- | 0.0     | 4.2  | ----- | 2.6      | 7.0  | ----- |
| Stroke.....                                | 108                | 17.6                | 21.5 | 5.7   | 25.9    | 27.6 | 8.7   | 27.8     | 31.2 | 7.6   |
| Hip Fracture.....                          | 34                 | 8.8                 | 7.2  | ----- | 17.6    | 12.3 | ----- | 26.5     | 15.6 | ----- |
| Sepsis.....                                | 54                 | 27.8                | 25.8 | 9.7   | 51.9    | 36.5 | 9.8   | 55.6     | 42.0 | 9.5   |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 15                 | 6.7                 | 3.4  | ----- | 20.0    | 7.0  | ----- | 20.0     | 10.3 | ----- |
| Carotid Endarterectomy.....                | 4                  | 0.0                 | 1.0  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.4  | ----- |
| Hip Replacement/Reconstruction.....        | 32                 | 6.3                 | 4.4  | ----- | 12.5    | 7.6  | ----- | 15.6     | 10.0 | ----- |
| Open Reduction of Hip Fracture.....        | 14                 | 7.1                 | 4.6  | ----- | 7.1     | 8.9  | ----- | 14.3     | 11.9 | ----- |
| Prostatectomy.....                         | 59                 | 0.0                 | 0.9  | 2.5   | 3.4     | 2.1  | 3.0   | 6.8      | 3.5  | 3.8   |
| Cholecystectomy.....                       | 33                 | 3.0                 | 3.5  | ----- | 3.0     | 6.8  | ----- | 3.0      | 9.4  | ----- |
| Hysterectomy.....                          | 11                 | 0.0                 | 0.9  | ----- | 0.0     | 1.9  | ----- | 0.0      | 2.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MT CARMEL MERCY HOSPITAL & MED CENTER

Medicare Provider Number: 230039

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.2 years

Proportion female..... 55.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 26.1 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 11.4 %

Admitted for emergency..... 72.4 %

### COMORBIDITIES:

Cancer..... 8.0 %

Chronic cardiovascular disease..... 35.3 %

Chronic liver disease..... 0.5 %

Chronic renal disease..... 8.2 %

Chronic pulmonary disease..... 9.8 %

Cerebrovascular degeneration..... 3.4 %

Diabetes mellitus..... 12.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 87.3%

State ..... 11.6%

Outside State ..... 1.1%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 253

Occupancy Rate ..... 62.0 %

Ownership/Control..... Church

Medicare Discharges ..... 23.4 %

Case Mix Index (CMI) ..... 1.2856

### STAFFING:

Total Number of Physicians..... 108

Percent of Physicians Board  
Certified Specialists..... 33.3 %

Medical Residents/Interns ..... 3

Registered Nurses..... 179

Licensed Practical Nurses ..... 14

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MT CLEMENS GENERAL HOSPITAL

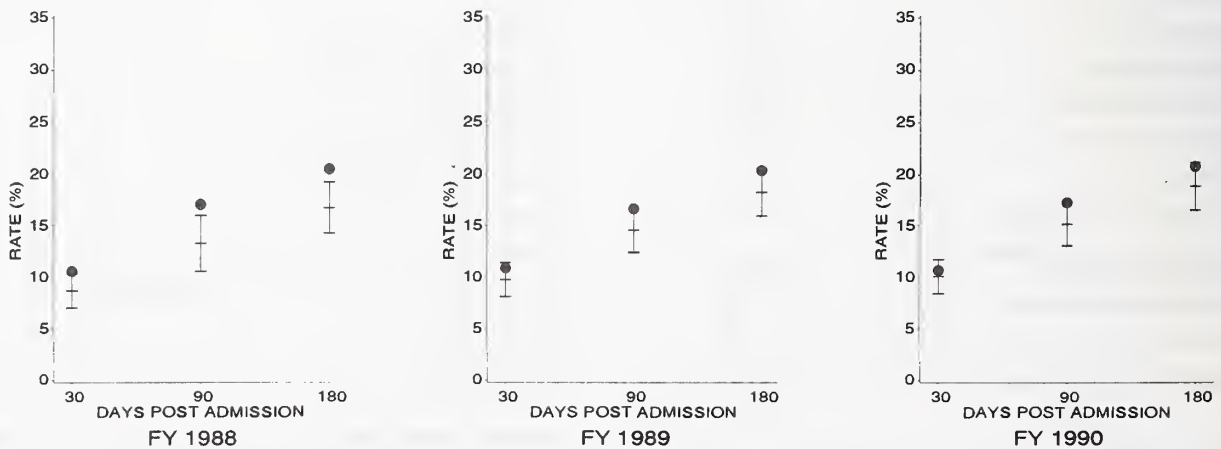
1000 HARRINGTON BLVD  
MT CLEMENS, MI 48043  
Medicare Provider Number: 230227

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1913               | 10.7                | 10.1 | 0.8  | 17.3    | 15.2 | 1.1  | 20.8     | 18.9 | 1.2  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 69                 | 29.0                | 26.3 | 5.7  | 30.4    | 29.1 | 5.6  | 30.4     | 31.8 | 6.1  |
| Congestive Heart Failure.....              | 122                | 12.3                | 14.3 | 3.6  | 21.3    | 22.7 | 4.6  | 26.2     | 28.8 | 4.6  |
| Pneumonia/Influenza.....                   | 74                 | 18.9                | 16.4 | 6.6  | 24.3    | 22.5 | 6.6  | 27.0     | 26.8 | 7.4  |
| Chronic Obstructive Pulmonary Disease..... | 38                 | 13.2                | 9.6  | ---- | 23.7    | 16.8 | ---- | 28.9     | 22.0 | ---- |
| Transient Cerebral Ischemia.....           | 47                 | 2.1                 | 1.7  | ---- | 4.3     | 3.7  | ---- | 10.6     | 5.9  | ---- |
| Stroke.....                                | 64                 | 23.4                | 23.1 | 5.4  | 35.9    | 29.7 | 6.5  | 40.6     | 33.5 | 7.1  |
| Hip Fracture.....                          | 51                 | 7.8                 | 6.4  | 3.7  | 11.8    | 11.8 | 5.0  | 15.7     | 15.5 | 5.7  |
| Sepsis.....                                | 22                 | 45.5                | 27.7 | ---- | 54.5    | 37.2 | ---- | 59.1     | 42.2 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 18                 | 0.0                 | 3.4  | ---- | 0.0     | 4.2  | ---- | 0.0      | 5.1  | ---- |
| Coronary Artery Bypass Graft.....          | 3                  | 0.0                 | 6.2  | ---- | 0.0     | 7.7  | ---- | 0.0      | 8.4  | ---- |
| Initial Pacemaker Insertion.....           | 11                 | 9.1                 | 4.6  | ---- | 27.3    | 9.7  | ---- | 27.3     | 14.0 | ---- |
| Carotid Endarterectomy.....                | 21                 | 0.0                 | 1.3  | ---- | 0.0     | 2.4  | ---- | 0.0      | 3.6  | ---- |
| Hip Replacement/Reconstruction.....        | 36                 | 0.0                 | 2.5  | ---- | 11.1    | 5.0  | ---- | 11.1     | 7.1  | ---- |
| Open Reduction of Hip Fracture.....        | 32                 | 12.5                | 6.4  | ---- | 15.6    | 12.2 | ---- | 21.9     | 16.4 | ---- |
| Prostatectomy.....                         | 37                 | 0.0                 | 0.6  | ---- | 2.7     | 1.6  | ---- | 2.7      | 2.8  | ---- |
| Cholecystectomy.....                       | 33                 | 6.1                 | 1.5  | ---- | 6.1     | 2.6  | ---- | 6.1      | 3.4  | ---- |
| Hysterectomy.....                          | 16                 | 0.0                 | 0.9  | ---- | 12.5    | 2.2  | ---- | 12.5     | 3.8  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MT CLEMENS GENERAL HOSPITAL

Medicare Provider Number: 230227

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.6 years |
| Proportion female.....        | 58.6 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 30.2 % |
| Transferred from skilled nursing facility..... | 3.5 %  |
| Admitted for elective procedure.....           | 30.5 % |
| Admitted for emergency.....                    | 62.9 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.6 %  |
| Chronic cardiovascular disease..... | 35.8 % |
| Chronic liver disease.....          | 1.2 %  |
| Chronic renal disease.....          | 4.5 %  |
| Chronic pulmonary disease.....      | 27.6 % |
| Cerebrovascular degeneration.....   | 3.2 %  |
| Diabetes mellitus.....              | 7.5 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 85.4%  |
| State .....         | 13.2%  |
| Outside State ..... | 1.4%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 9.5 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 264                 |
| Occupancy Rate .....       | 61.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 33.5 %              |
| Case Mix Index (CMI) ..... | 1.3106              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 155    |
| Percent of Physicians Board<br>Certified Specialists ..... | 62.6 % |
| Medical Residents/Interns .....                            | 69     |
| Registered Nurses.....                                     | 226    |
| Licensed Practical Nurses.....                             | 46     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | Yes |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# MUNISING MEMORIAL HOSPITAL

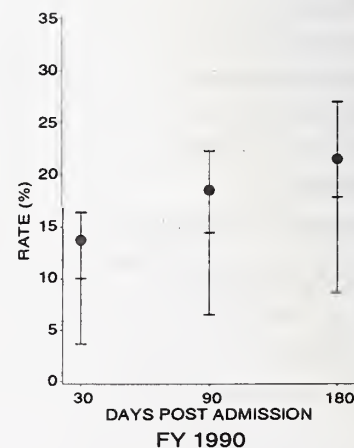
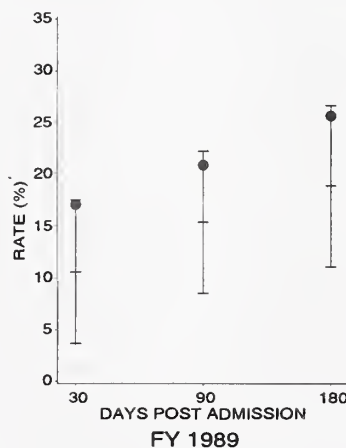
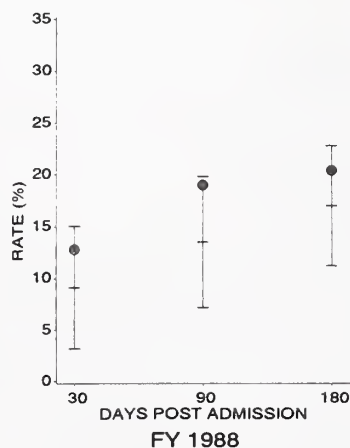
SAND POINT RD  
MUNISING, MI 49862  
Medicare Provider Number: 230116

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 205             | 13.7                | 10.0 | 3.2  | 18.5    | 14.4 | 3.9  | 21.5     | 17.8 | 4.6  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 10              | 30.0                | 27.3 | ---- | 40.0    | 29.9 | ---- | 40.0     | 32.8 | ---- |
| Congestive Heart Failure.....              | 9               | 22.2                | 11.1 | ---- | 33.3    | 17.7 | ---- | 33.3     | 23.9 | ---- |
| Pneumonia/Influenza.....                   | 10              | 20.0                | 11.4 | ---- | 20.0    | 15.5 | ---- | 50.0     | 19.1 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 20.0                | 7.3  | ---- | 20.0    | 12.0 | ---- | 20.0     | 16.0 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 0.5  | ---- | 0.0     | 1.1  | ---- | 0.0      | 1.8  | ---- |
| Stroke.....                                | 13              | 7.7                 | 15.8 | ---- | 23.1    | 20.9 | ---- | 23.1     | 24.4 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 3               | 0.0                 | 18.0 | ---- | 0.0     | 22.0 | ---- | 0.0      | 24.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 2               | 0.0                 | 1.4  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.5  | ---- |
| Cholecystectomy.....                       | 2               | 0.0                 | 1.6  | ---- | 0.0     | 2.5  | ---- | 0.0      | 3.2  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.1  | ---- | 0.0     | 0.3  | ---- | 0.0      | 0.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MUNISING MEMORIAL HOSPITAL

Medicare Provider Number: 230116

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.4 years

Proportion female..... 55.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 87.3 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.0 %

Admitted for emergency..... 99.0 %

### COMORBIDITIES:

Cancer..... 3.9 %

Chronic cardiovascular disease..... 27.8 %

Chronic liver disease..... 1.0 %

Chronic renal disease..... 1.5 %

Chronic pulmonary disease..... 10.7 %

Cerebrovascular degeneration..... 3.4 %

Diabetes mellitus..... 10.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 87.7%

State..... 9.3%

Outside State..... 3.0%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.0 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1987

### PROFILE:

Total Beds..... 40

Ownership/Control..... Private, Non-Profit

Case Mix Index (CMI)..... 0.9402

### STAFFING:

Medical Residents/Interns..... 0

Registered Nurses..... 9

Licensed Practical Nurses..... 4

### SPECIALTY SERVICES:

Burn Unit..... No

Coronary Care Unit..... No

Hospice Care..... No

Intensive Care Unit..... No

Organ Transplant..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MUNSON MEDICAL CENTER

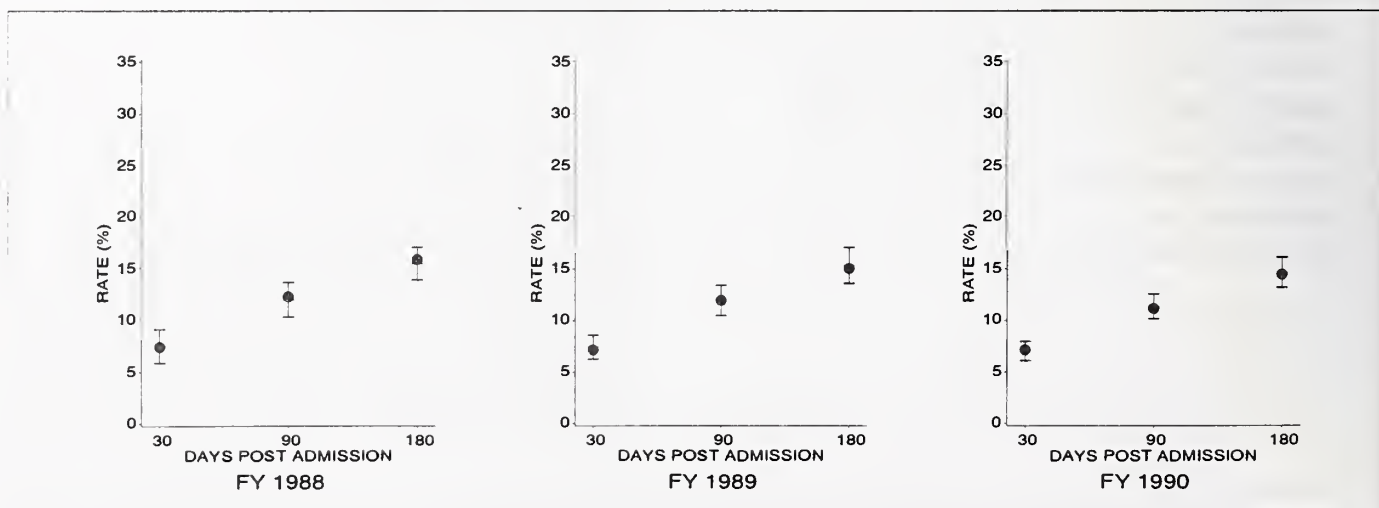
1105 SIXTH STREET  
TRAVERSE CITY, MI 49684  
Medicare Provider Number: 230097

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3103            | 7.1                 | 7.0  | 0.5  | 11.1    | 11.3 | 0.6  | 14.4     | 14.6 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 72              | 15.3                | 22.4 | 6.1  | 22.2    | 25.4 | 5.9  | 26.4     | 28.0 | 5.6  |
| Congestive Heart Failure.....              | 127             | 12.6                | 13.7 | 3.8  | 18.9    | 22.2 | 4.3  | 27.6     | 28.8 | 4.6  |
| Pneumonia/Influenza.....                   | 98              | 17.3                | 12.4 | 7.2  | 21.4    | 17.5 | 7.1  | 21.4     | 21.0 | 7.7  |
| Chronic Obstructive Pulmonary Disease..... | 39              | 5.1                 | 5.9  | ---- | 10.3    | 11.1 | ---- | 17.9     | 15.6 | ---- |
| Transient Cerebral Ischemia.....           | 51              | 0.0                 | 1.5  | 2.5  | 2.0     | 3.4  | 3.6  | 5.9      | 5.7  | 4.2  |
| Stroke.....                                | 105             | 19.0                | 18.4 | 5.0  | 27.6    | 24.8 | 4.5  | 27.6     | 28.4 | 4.4  |
| Hip Fracture.....                          | 41              | 7.3                 | 8.0  | ---- | 12.2    | 14.1 | ---- | 17.1     | 18.4 | ---- |
| Sepsis.....                                | 21              | 9.5                 | 18.6 | ---- | 23.8    | 28.7 | ---- | 28.6     | 34.6 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 25              | 0.0                 | 1.8  | ---- | 0.0     | 2.5  | ---- | 0.0      | 3.4  | ---- |
| Coronary Artery Bypass Graft.....          | 30              | 3.3                 | 2.5  | ---- | 10.0    | 3.5  | ---- | 10.0     | 4.1  | ---- |
| Initial Pacemaker Insertion.....           | 19              | 0.0                 | 2.4  | ---- | 5.3     | 4.8  | ---- | 5.3      | 7.0  | ---- |
| Carotid Endarterectomy.....                | 61              | 0.0                 | 1.0  | ---- | 0.0     | 1.8  | ---- | 0.0      | 2.8  | ---- |
| Hip Replacement/Reconstruction.....        | 67              | 4.5                 | 3.3  | 2.4  | 6.0     | 5.8  | 3.0  | 7.5      | 7.6  | 3.3  |
| Open Reduction of Hip Fracture.....        | 17              | 11.8                | 6.7  | ---- | 11.8    | 12.9 | ---- | 17.6     | 17.7 | ---- |
| Prostatectomy.....                         | 142             | 0.7                 | 0.9  | 1.0  | 1.4     | 2.1  | 1.6  | 2.1      | 3.5  | 2.2  |
| Cholecystectomy.....                       | 72              | 0.0                 | 1.5  | 2.0  | 1.4     | 3.0  | 2.4  | 1.4      | 4.3  | 3.4  |
| Hysterectomy.....                          | 23              | 0.0                 | 1.1  | ---- | 0.0     | 2.5  | ---- | 0.0      | 4.0  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# MUNSON MEDICAL CENTER

Medicare Provider Number: 230097

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.3 years  
Proportion female..... 50.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 97.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 35.7 %  
Admitted for emergency..... 46.1 %

### COMORBIDITIES:

Cancer..... 9.8 %  
Chronic cardiovascular disease..... 31.5 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 3.0 %  
Chronic pulmonary disease..... 12.3 %  
Cerebrovascular degeneration..... 3.9 %  
Diabetes mellitus..... 6.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 42.1%  
State ..... 54.3%  
Outside State ..... 3.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 328  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 37.1 %  
Case Mix Index (CMI) ..... 1.3176

### STAFFING:

Total Number of Physicians..... 156  
Percent of Physicians Board  
Certified Specialists..... 89.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 161  
Licensed Practical Nurses ..... 60

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MUSKEGON GENERAL HOSPITAL

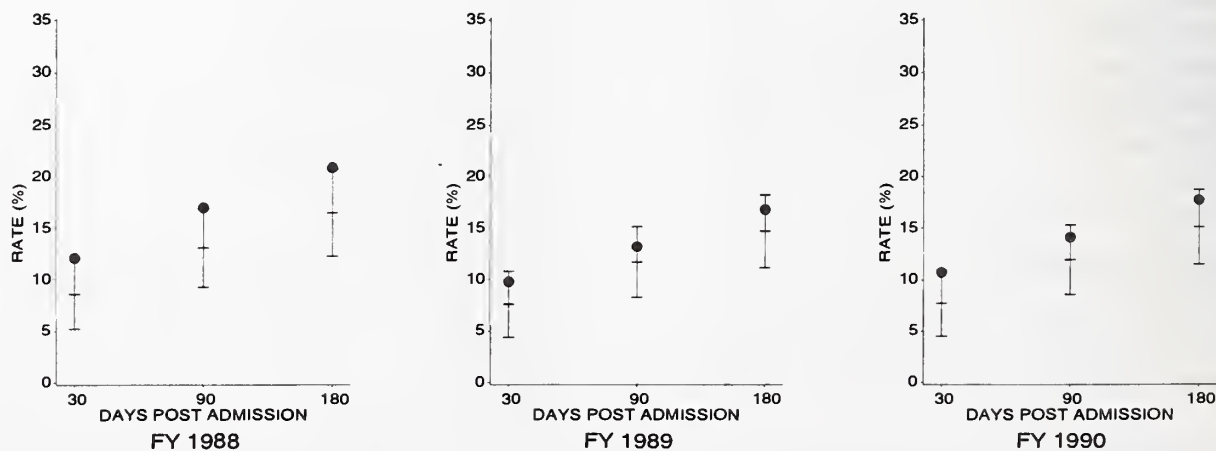
1700 OAK AVENUE  
MUSKEGON, MI 49442  
Medicare Provider Number: 230159

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 637                | 10.7                | 7.7  | 1.6  | 14.1    | 11.9 | 1.7  | 17.7     | 15.1 | 1.8  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 26                 | 30.8                | 22.5 | ---- | 30.8    | 25.5 | ---- | 34.6     | 28.3 | ---- |
| Congestive Heart Failure.....              | 31                 | 16.1                | 10.7 | ---- | 29.0    | 17.1 | ---- | 29.0     | 22.5 | ---- |
| Pneumonia/Influenza.....                   | 28                 | 25.0                | 10.3 | ---- | 32.1    | 14.6 | ---- | 32.1     | 17.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 13                 | 7.7                 | 8.7  | ---- | 23.1    | 14.7 | ---- | 30.8     | 19.3 | ---- |
| Transient Cerebral Ischemia.....           | 6                  | 0.0                 | 1.5  | ---- | 0.0     | 3.6  | ---- | 16.7     | 6.3  | ---- |
| Stroke.....                                | 30                 | 13.3                | 15.8 | ---- | 20.0    | 21.7 | ---- | 30.0     | 25.2 | ---- |
| Hip Fracture.....                          | 23                 | 8.7                 | 5.2  | ---- | 21.7    | 9.3  | ---- | 26.1     | 12.1 | ---- |
| Sepsis.....                                | 6                  | 16.7                | 17.0 | ---- | 16.7    | 23.2 | ---- | 16.7     | 27.1 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1                  | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.4  | ---- |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 22                 | 0.0                 | 2.0  | ---- | 4.5     | 3.8  | ---- | 4.5      | 5.1  | ---- |
| Open Reduction of Hip Fracture.....        | 13                 | 7.7                 | 5.0  | ---- | 23.1    | 9.1  | ---- | 30.8     | 12.0 | ---- |
| Prostatectomy.....                         | 42                 | 0.0                 | 0.8  | ---- | 2.4     | 1.8  | ---- | 2.4      | 3.1  | ---- |
| Cholecystectomy.....                       | 15                 | 0.0                 | 0.8  | ---- | 0.0     | 1.4  | ---- | 0.0      | 1.9  | ---- |
| Hysterectomy.....                          | 9                  | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# MUSKEGON GENERAL HOSPITAL

Medicare Provider Number: 230159

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.7 years  
Proportion female..... 53.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 46.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 39.2 %  
Admitted for emergency..... 52.6 %

### COMORBIDITIES:

Cancer..... 7.1 %  
Chronic cardiovascular disease..... 31.7 %  
Chronic liver disease..... 0.2 %  
Chronic renal disease..... 2.7 %  
Chronic pulmonary disease..... 19.5 %  
Cerebrovascular degeneration..... 6.9 %  
Diabetes mellitus..... 7.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 81.2%  
State ..... 18.0%  
Outside State ..... 0.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 113  
Occupancy Rate ..... 55.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 20.7 %  
Case Mix Index (CMI) ..... 1.3161

### STAFFING:

Total Number of Physicians..... 58  
Percent of Physicians Board  
Certified Specialists ..... 55.2 %  
Medical Residents/Interns ..... 8  
Registered Nurses..... 108  
Licensed Practical Nurses ..... 58

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NEW CENTER HOSPITAL

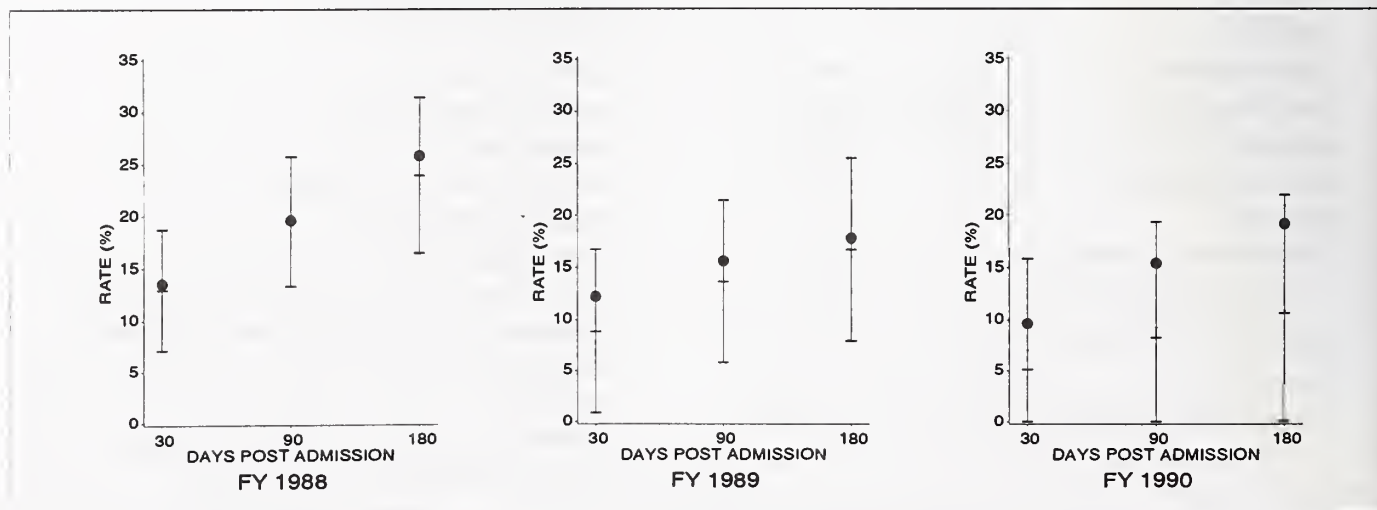
801 VIRGINIA PARK  
DETROIT, MI 48202  
Medicare Provider Number: 230012

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 52              | 9.6                 | 5.1  | 5.4  | 15.4    | 8.2  | 5.6  | 19.2     | 10.6 | 5.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Congestive Heart Failure.....              | 2               | 50.0                | 5.8  | ---- | 50.0    | 9.8  | ---- | 50.0     | 14.1 | ---- |
| Pneumonia/Influenza.....                   | 1               | 100.0               | 20.2 | ---- | 100.0   | 27.6 | ---- | 100.0    | 32.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 1               | 0.0                 | 4.0  | ---- | 0.0     | 6.9  | ---- | 0.0      | 9.7  | ---- |
| Transient Cerebral Ischemia.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 1               | 0.0                 | 23.5 | ---- | 0.0     | 36.8 | ---- | 0.0      | 43.5 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1               | 0.0                 | 6.7  | ---- | 0.0     | 8.8  | ---- | 0.0      | 9.9  | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0               |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# NEW CENTER HOSPITAL

Medicare Provider Number: 230012

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 58.8 years  
Proportion female..... 32.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 7.7 %  
Transferred from skilled nursing facility..... 1.9 %  
Admitted for elective procedure..... 17.3 %  
Admitted for emergency..... 1.9 %

### COMORBIDITIES:

Cancer..... 1.9 %  
Chronic cardiovascular disease..... 13.5 %  
Chronic liver disease..... 1.9 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 3.8 %  
Cerebrovascular degeneration..... 5.8 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 89.9%  
State ..... 8.3%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1989

### PROFILE:

Total Beds ..... 122  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 0.8536

### STAFFING:

Medical Residents/Interns ..... 7  
Registered Nurses..... 30  
Licensed Practical Nurses ..... 1

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTH DETROIT GENERAL HOSPITAL

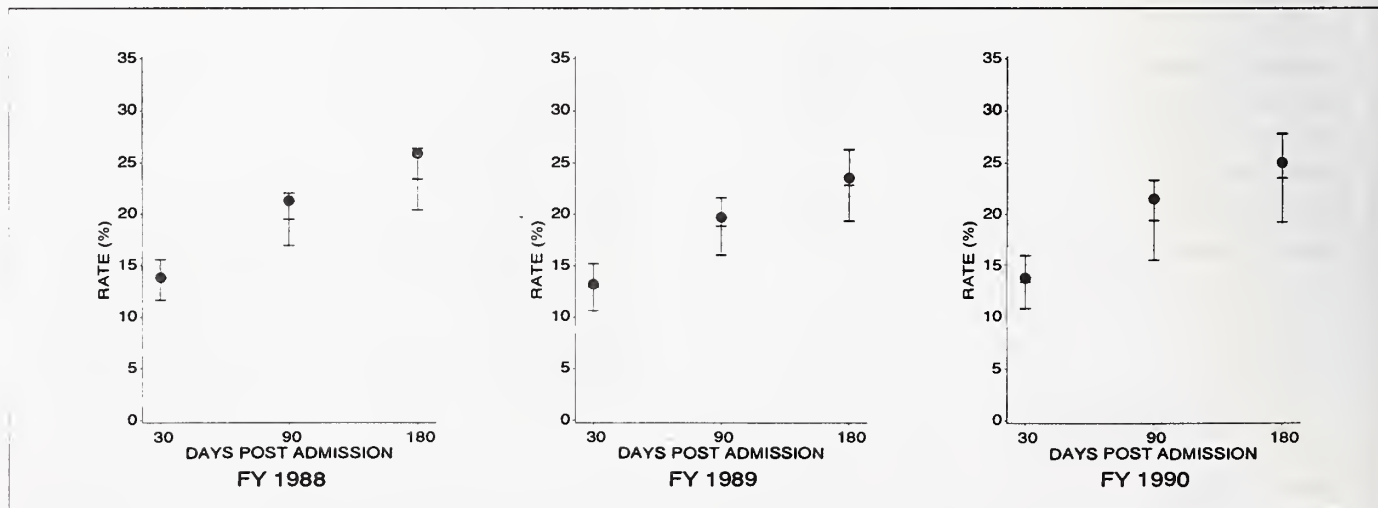
3105 CARPENTER  
DETROIT, MI 48212  
Medicare Provider Number: 230173

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 829             | 13.8                | 13.4 | 1.3   | 21.5    | 19.4 | 1.9   | 25.0     | 23.5 | 2.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 32              | 37.5                | 31.4 | ----- | 43.8    | 35.2 | ----- | 46.9     | 38.0 | ----- |
| Congestive Heart Failure.....              | 38              | 15.8                | 13.8 | ----- | 15.8    | 21.8 | ----- | 18.4     | 27.8 | ----- |
| Pneumonia/Influenza.....                   | 51              | 17.6                | 18.9 | 7.8   | 23.5    | 25.6 | 6.7   | 31.4     | 29.6 | 7.2   |
| Chronic Obstructive Pulmonary Disease..... | 19              | 10.5                | 10.0 | ----- | 15.8    | 16.1 | ----- | 21.1     | 20.5 | ----- |
| Transient Cerebral Ischemia.....           | 9               | 0.0                 | 1.2  | ----- | 0.0     | 2.8  | ----- | 0.0      | 4.6  | ----- |
| Stroke.....                                | 47              | 10.6                | 18.1 | ----- | 25.5    | 24.9 | ----- | 25.5     | 28.8 | ----- |
| Hip Fracture.....                          | 22              | 18.2                | 8.2  | ----- | 27.3    | 14.5 | ----- | 36.4     | 18.6 | ----- |
| Sepsis.....                                | 29              | 37.9                | 26.9 | ----- | 48.3    | 35.8 | ----- | 55.2     | 40.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 4.5  | ----- | 0.0     | 8.3  | ----- | 0.0      | 11.5 | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 11              | 9.1                 | 7.9  | ----- | 18.2    | 14.6 | ----- | 18.2     | 19.0 | ----- |
| Open Reduction of Hip Fracture.....        | 15              | 20.0                | 7.2  | ----- | 26.7    | 13.6 | ----- | 33.3     | 17.9 | ----- |
| Prostatectomy.....                         | 16              | 0.0                 | 1.5  | ----- | 0.0     | 3.3  | ----- | 0.0      | 5.5  | ----- |
| Cholecystectomy.....                       | 4               | 0.0                 | 4.1  | ----- | 25.0    | 9.6  | ----- | 25.0     | 14.4 | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 5.3  | ----- | 0.0     | 12.4 | ----- | 0.0      | 18.6 | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NORTH DETROIT GENERAL HOSPITAL

Medicare Provider Number: 230173

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.3 years |
| Proportion female.....        | 55.2 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 34.5 % |
| Transferred from skilled nursing facility..... | 12.4 % |
| Admitted for elective procedure.....           | 0.0 %  |
| Admitted for emergency.....                    | 62.4 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 4.9 %  |
| Chronic cardiovascular disease..... | 44.4 % |
| Chronic liver disease.....          | 1.2 %  |
| Chronic renal disease.....          | 1.0 %  |
| Chronic pulmonary disease.....      | 11.9 % |
| Cerebrovascular degeneration.....   | 3.3 %  |
| Diabetes mellitus.....              | 12.3 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                    |        |
|--------------------|--------|
| County/City.....   | 91.4%  |
| State.....         | 7.2%   |
| Outside State..... | 1.4%   |
| Total.....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|               |           |
|---------------|-----------|
| Hospital..... | 10.1 Days |
| State.....    | 8.5 Days  |
| National..... | 8.6 Days  |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                           |                     |
|---------------------------|---------------------|
| Total Beds.....           | 288                 |
| Occupancy Rate.....       | 35.0 %              |
| Ownership/Control.....    | Private, Non-Profit |
| Medicare Discharges.....  | 51.8 %              |
| Case Mix Index (CMI)..... | 1.4387              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 77     |
| Percent of Physicians Board<br>Certified Specialists..... | 44.2 % |
| Medical Residents/Interns.....                            | 2      |
| Registered Nurses.....                                    | 68     |
| Licensed Practical Nurses.....                            | 30     |

### SPECIALTY SERVICES:

|                                      |     |
|--------------------------------------|-----|
| Burn Unit.....                       | No  |
| Cardiac Intensive Care.....          | No  |
| Comprehensive Geriatric.....         | No  |
| Hospice Care.....                    | No  |
| Medical/Surgical Intensive Care..... | Yes |
| Organ/Tissue Transplant.....         | No  |
| Other Intensive Care.....            | No  |
| Trauma Center.....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                          |     |
|--------------------------|-----|
| Alcohol/Drug.....        | No  |
| Rehabilitation.....      | No  |
| Psychiatric.....         | Yes |
| Medicare Swing Beds..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTH OAKLAND MEDICAL CENTER

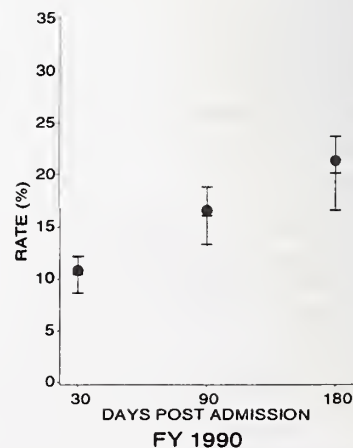
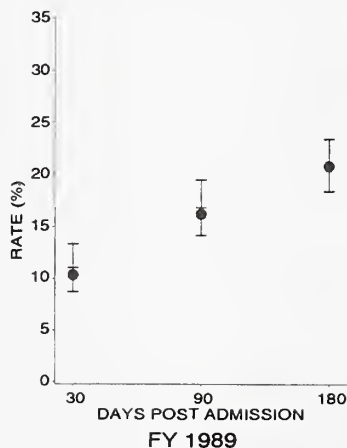
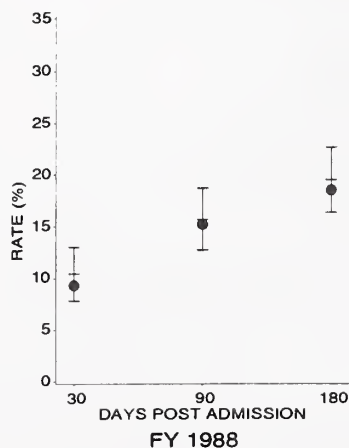
461 W HURON ST  
PONTIAC, MI 48341  
Medicare Provider Number: 230013

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1431            | 10.8                | 10.4 | 0.9   | 16.6    | 16.1 | 1.4   | 21.4     | 20.2 | 1.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 46              | 13.0                | 23.7 | ----- | 19.6    | 26.2 | ----- | 30.4     | 28.6 | ----- |
| Congestive Heart Failure.....              | 118             | 17.8                | 15.6 | 5.6   | 26.3    | 25.0 | 9.6   | 38.1     | 31.7 | 9.2   |
| Pneumonia/Influenza.....                   | 61              | 21.3                | 16.7 | 8.5   | 29.5    | 22.9 | 8.2   | 31.1     | 27.0 | 7.0   |
| Chronic Obstructive Pulmonary Disease..... | 42              | 4.8                 | 10.3 | ----- | 7.1     | 17.7 | ----- | 11.9     | 23.0 | ----- |
| Transient Cerebral Ischemia.....           | 14              | 7.1                 | 1.5  | ----- | 7.1     | 3.4  | ----- | 7.1      | 5.5  | ----- |
| Stroke.....                                | 56              | 17.9                | 21.0 | 8.9   | 26.8    | 29.5 | 10.9  | 28.6     | 33.8 | 9.6   |
| Hip Fracture.....                          | 42              | 7.1                 | 6.8  | ----- | 14.3    | 11.5 | ----- | 14.3     | 14.7 | ----- |
| Sepsis.....                                | 20              | 30.0                | 25.8 | ----- | 35.0    | 36.0 | ----- | 40.0     | 40.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 7.7                 | 4.3  | ----- | 15.4    | 9.2  | ----- | 23.1     | 13.6 | ----- |
| Carotid Endarterectomy.....                | 6               | 0.0                 | 2.0  | ----- | 0.0     | 3.7  | ----- | 0.0      | 5.3  | ----- |
| Hip Replacement/Reconstruction.....        | 26              | 3.8                 | 3.6  | ----- | 11.5    | 7.0  | ----- | 11.5     | 9.5  | ----- |
| Open Reduction of Hip Fracture.....        | 20              | 5.0                 | 7.2  | ----- | 15.0    | 12.4 | ----- | 15.0     | 15.9 | ----- |
| Prostatectomy.....                         | 33              | 0.0                 | 1.1  | ----- | 0.0     | 2.1  | ----- | 0.0      | 3.4  | ----- |
| Cholecystectomy.....                       | 28              | 10.7                | 4.8  | ----- | 14.3    | 7.6  | ----- | 14.3     | 9.6  | ----- |
| Hysterectomy.....                          | 20              | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# NORTH OAKLAND MEDICAL CENTER

Medicare Provider Number: 230013

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.0 years  
Proportion female..... 55.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 35.4 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 15.0 %  
Admitted for emergency..... 56.1 %

### COMORBIDITIES:

Cancer..... 9.4 %  
Chronic cardiovascular disease..... 47.2 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 5.2 %  
Chronic pulmonary disease..... 17.6 %  
Cerebrovascular degeneration..... 3.6 %  
Diabetes mellitus..... 11.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 92.9%  
State ..... 5.0%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 298  
Occupancy Rate ..... 56.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 21.5 %  
Case Mix Index (CMI) ..... 1.2862

### STAFFING:

Total Number of Physicians..... 261  
Percent of Physicians Board  
Certified Specialists ..... 64.8 %  
Medical Residents/Interns ..... 38  
Registered Nurses..... 321  
Licensed Practical Nurses ..... 61

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTH OTTAWA COMMUNITY HOSPITAL

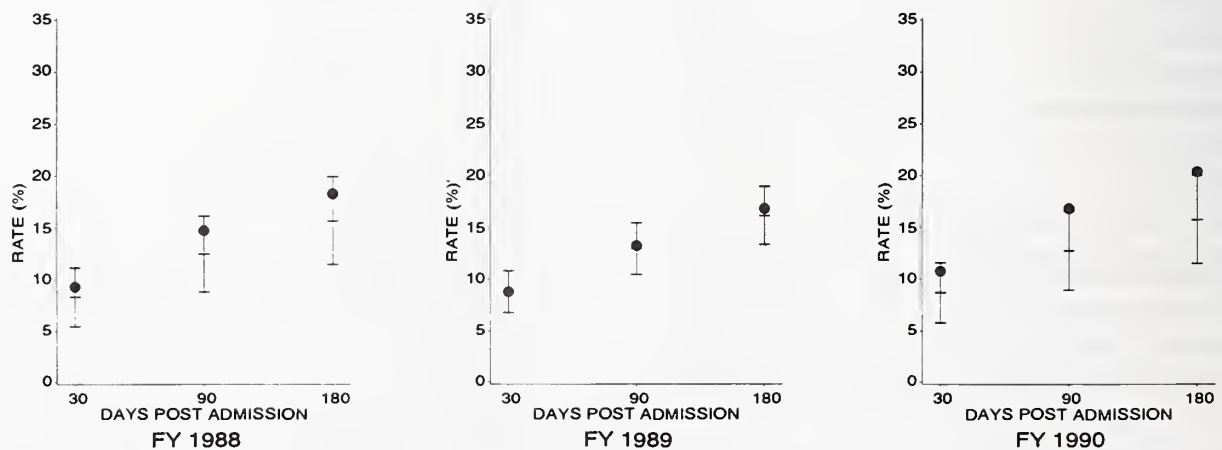
1309 SHELDON RD  
GRAND HAVEN, MI 49417  
Medicare Provider Number: 230174

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 769             | 10.8                | 8.7  | 1.5  | 16.9    | 12.8 | 1.9  | 20.4     | 15.8 | 2.1  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 37              | 35.1                | 23.3 | ---- | 43.2    | 26.6 | ---- | 48.6     | 29.4 | ---- |
| Congestive Heart Failure.....              | 36              | 13.9                | 14.0 | ---- | 30.6    | 21.9 | ---- | 38.9     | 27.8 | ---- |
| Pneumonia/Influenza.....                   | 35              | 22.9                | 13.0 | ---- | 28.6    | 18.2 | ---- | 31.4     | 22.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 5               | 20.0                | 5.9  | ---- | 20.0    | 11.0 | ---- | 20.0     | 15.0 | ---- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.2  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.6  | ---- |
| Stroke.....                                | 41              | 29.3                | 18.3 | ---- | 34.1    | 24.8 | ---- | 41.5     | 28.7 | ---- |
| Hip Fracture.....                          | 41              | 9.8                 | 6.8  | ---- | 14.6    | 12.2 | ---- | 14.6     | 15.8 | ---- |
| Sepsis.....                                | 16              | 18.8                | 28.6 | ---- | 25.0    | 35.2 | ---- | 31.3     | 39.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 2.8  | ---- | 0.0     | 5.1  | ---- | 0.0      | 7.2  | ---- |
| Carotid Endarterectomy.....                | 3               | 0.0                 | 1.2  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.1  | ---- |
| Hip Replacement/Reconstruction.....        | 32              | 6.3                 | 4.1  | ---- | 12.5    | 7.4  | ---- | 12.5     | 9.7  | ---- |
| Open Reduction of Hip Fracture.....        | 21              | 9.5                 | 6.0  | ---- | 14.3    | 11.0 | ---- | 14.3     | 14.6 | ---- |
| Prostatectomy.....                         | 54              | 0.0                 | 1.0  | 1.7  | 1.9     | 2.5  | 2.4  | 7.4      | 4.3  | 3.8  |
| Cholecystectomy.....                       | 23              | 8.7                 | 3.5  | ---- | 8.7     | 7.1  | ---- | 17.4     | 10.2 | ---- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.2  | ---- | 0.0     | 0.4  | ---- | 0.0      | 0.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NORTH OTTAWA COMMUNITY HOSPITAL

Medicare Provider Number: 230174

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.1 years  
Proportion female..... 54.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 45.6 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 22.6 %  
Admitted for emergency..... 19.0 %

### COMORBIDITIES:

Cancer..... 8.3 %  
Chronic cardiovascular disease..... 31.5 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 9.5 %  
Cerebrovascular degeneration..... 5.6 %  
Diabetes mellitus..... 9.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 87.8%  
State ..... 10.0%  
Outside State ..... 2.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 104  
Occupancy Rate ..... 33.0 %  
Ownership/Control..... District/Authority  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 1.2630

### STAFFING:

Total Number of Physicians..... 61  
Percent of Physicians Board  
Certified Specialists ..... 75.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 79  
Licensed Practical Nurses ..... 17

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTHERN MICHIGAN HOSPITALS

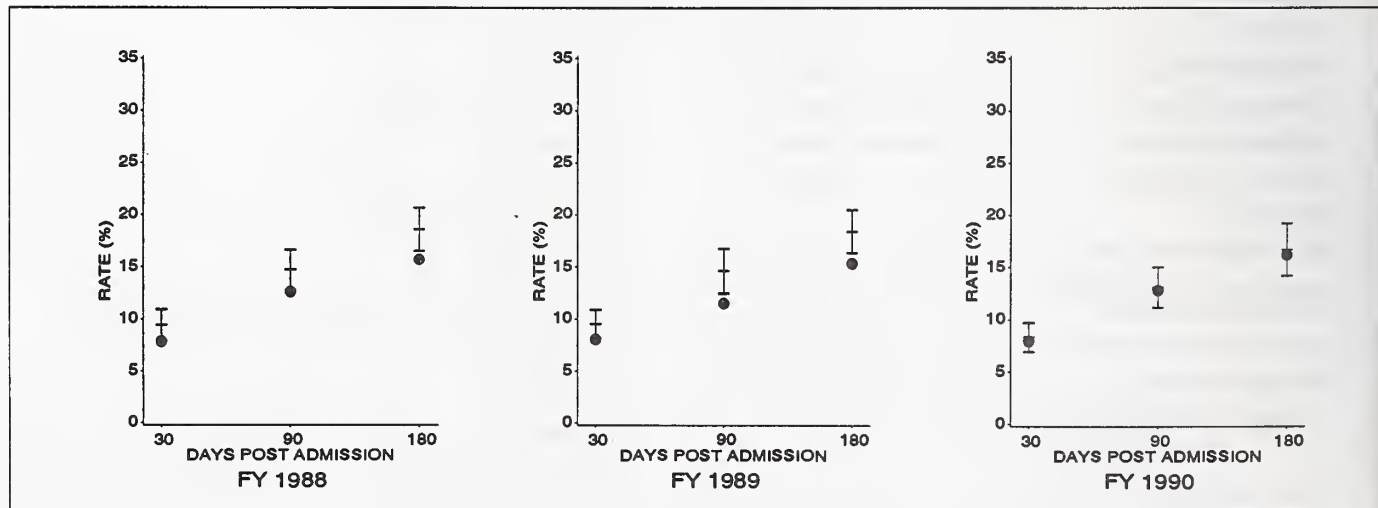
416 CONNABLE AVE  
PETOSKEY, MI 49770  
Medicare Provider Number: 230105

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2390            | 7.9                 | 8.3  | 0.7   | 12.8    | 13.1 | 1.0   | 16.2     | 16.7 | 1.3   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 60              | 20.0                | 22.3 | 5.9   | 21.7    | 25.1 | 6.6   | 26.7     | 27.6 | 6.5   |
| Congestive Heart Failure.....              | 112             | 19.6                | 14.7 | 6.1   | 27.7    | 23.6 | 8.0   | 33.9     | 30.2 | 7.7   |
| Pneumonia/Influenza.....                   | 49              | 16.3                | 17.1 | ----- | 22.4    | 23.9 | ----- | 22.4     | 28.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 13              | 7.7                 | 10.9 | ----- | 7.7     | 18.4 | ----- | 23.1     | 23.5 | ----- |
| Transient Cerebral Ischemia.....           | 30              | 0.0                 | 1.0  | ----- | 0.0     | 2.4  | ----- | 3.3      | 4.2  | ----- |
| Stroke.....                                | 92              | 20.7                | 19.2 | 4.2   | 27.2    | 26.1 | 5.8   | 30.4     | 29.9 | 5.3   |
| Hip Fracture.....                          | 52              | 3.8                 | 6.1  | 5.3   | 7.7     | 10.9 | 6.6   | 11.5     | 14.5 | 6.9   |
| Sepsis.....                                | 30              | 16.7                | 28.1 | ----- | 23.3    | 35.8 | ----- | 26.7     | 40.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 46              | 6.5                 | 3.1  | ----- | 8.7     | 4.2  | ----- | 10.9     | 5.2  | ----- |
| Coronary Artery Bypass Graft.....          | 100             | 3.0                 | 4.9  | 3.2   | 4.0     | 7.1  | 4.4   | 4.0      | 8.2  | 4.7   |
| Initial Pacemaker Insertion.....           | 31              | 0.0                 | 3.0  | ----- | 0.0     | 5.7  | ----- | 3.2      | 8.1  | ----- |
| Carotid Endarterectomy.....                | 45              | 0.0                 | 1.3  | ----- | 0.0     | 2.5  | ----- | 0.0      | 3.9  | ----- |
| Hip Replacement/Reconstruction.....        | 70              | 1.4                 | 1.7  | 1.6   | 4.3     | 3.2  | 2.4   | 5.7      | 4.5  | 2.8   |
| Open Reduction of Hip Fracture.....        | 25              | 4.0                 | 6.6  | ----- | 8.0     | 12.4 | ----- | 12.0     | 16.6 | ----- |
| Prostatectomy.....                         | 107             | 0.0                 | 0.8  | 1.2   | 0.9     | 2.0  | 1.6   | 2.8      | 3.5  | 1.9   |
| Cholecystectomy.....                       | 58              | 0.0                 | 2.9  | 3.6   | 3.4     | 5.6  | 5.0   | 3.4      | 7.7  | 5.7   |
| Hysterectomy.....                          | 32              | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 1.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# NORTHERN MICHIGAN HOSPITALS

Medicare Provider Number: 230105

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.4 years  
Proportion female..... 47.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 1.0 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 50.3 %  
Admitted for emergency..... 36.5 %

### COMORBIDITIES:

Cancer..... 10.5 %  
Chronic cardiovascular disease..... 32.4 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 5.4 %  
Chronic pulmonary disease..... 12.8 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 8.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 23.8%  
State ..... 71.7%  
Outside State ..... 4.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 263  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 1.5334

### STAFFING:

Total Number of Physicians..... 100  
Percent of Physicians Board  
Certified Specialists ..... 87.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 281  
Licensed Practical Nurses ..... 42

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# NORTHWEST GENERAL OSTEOPATHIC HOSPITAL

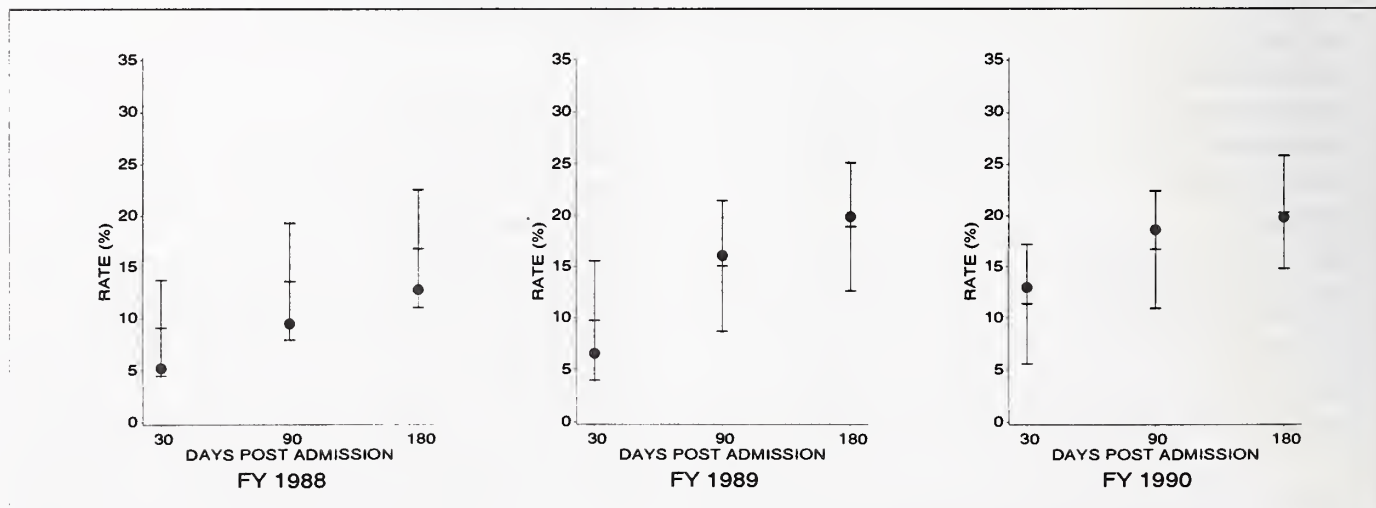
8741 W CHICAGO BLVD  
DETROIT, MI 48204  
Medicare Provider Number: 230224

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 247             | 13.0                | 11.4 | 2.9  | 18.6    | 16.7 | 2.9  | 19.8     | 20.3 | 2.8  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 3               | 0.0                 | 15.2 | ---- | 0.0     | 18.0 | ---- | 0.0      | 20.2 | ---- |
| Congestive Heart Failure.....              | 30              | 10.0                | 14.2 | ---- | 10.0    | 22.9 | ---- | 10.0     | 28.8 | ---- |
| Pneumonia/Influenza.....                   | 16              | 12.5                | 9.4  | ---- | 18.8    | 12.6 | ---- | 25.0     | 15.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.1  | ---- | 0.0     | 2.7  | ---- | 0.0      | 4.6  | ---- |
| Stroke.....                                | 13              | 23.1                | 18.9 | ---- | 23.1    | 25.1 | ---- | 23.1     | 28.7 | ---- |
| Hip Fracture.....                          | 3               | 0.0                 | 5.8  | ---- | 33.3    | 10.9 | ---- | 33.3     | 14.1 | ---- |
| Sepsis.....                                | 4               | 75.0                | 34.4 | ---- | 75.0    | 38.4 | ---- | 75.0     | 42.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 2               | 0.0                 | 3.6  | ---- | 50.0    | 7.1  | ---- | 50.0     | 9.5  | ---- |
| Open Reduction of Hip Fracture.....        | 2               | 0.0                 | 4.9  | ---- | 0.0     | 9.5  | ---- | 0.0      | 12.7 | ---- |
| Prostatectomy.....                         | 5               | 0.0                 | 4.1  | ---- | 0.0     | 9.9  | ---- | 0.0      | 16.0 | ---- |
| Cholecystectomy.....                       | 1               | 0.0                 | 0.3  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.7  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# NORTHWEST GENERAL OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230224

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.8 years  
Proportion female..... 49.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 22.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 1.6 %  
Admitted for emergency..... 75.3 %

### COMORBIDITIES:

Cancer..... 4.0 %  
Chronic cardiovascular disease..... 25.9 %  
Chronic liver disease..... 2.4 %  
Chronic renal disease..... 3.6 %  
Chronic pulmonary disease..... 10.9 %  
Cerebrovascular degeneration..... 1.2 %  
Diabetes mellitus..... 12.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 98.6%  
State ..... 0.5%  
Outside State ..... 0.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 88  
Ownership/Control..... Private, Non-Profit  
Case Mix Index (CMI) ..... 1.2452

### STAFFING:

Medical Residents/Interns ..... 0  
Registered Nurses..... 37  
Licensed Practical Nurses..... 30

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... No  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# OAKLAND GENERAL HOSPITAL

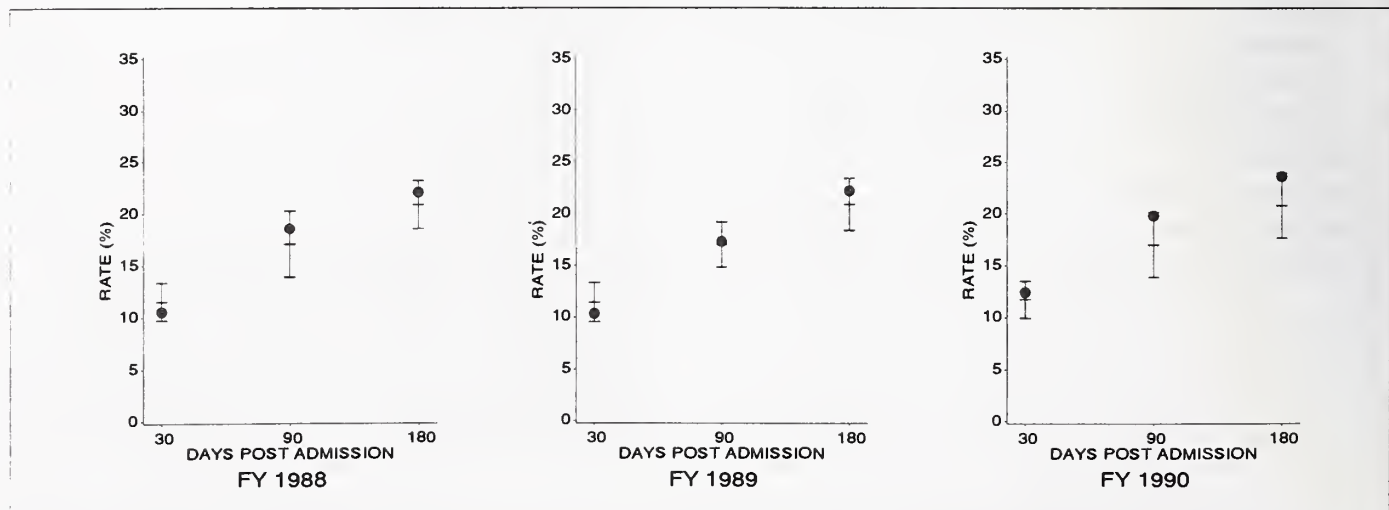
27351 DEQUINDRE  
MADISON HEIGHTS, MI 48071  
Medicare Provider Number: 230223

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1447            | 12.4                | 11.7 | 0.9  | 19.8    | 17.0 | 1.6  | 23.6     | 20.8 | 1.6  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 55              | 27.3                | 29.4 | 6.5  | 34.5    | 32.1 | 7.1  | 36.4     | 34.3 | 7.4  |
| Congestive Heart Failure.....              | 95              | 12.6                | 15.7 | 5.6  | 23.2    | 24.4 | 5.0  | 27.4     | 30.8 | 5.6  |
| Pneumonia/Influenza.....                   | 67              | 11.9                | 18.9 | 9.7  | 20.9    | 25.0 | 7.8  | 23.9     | 29.4 | 7.7  |
| Chronic Obstructive Pulmonary Disease..... | 20              | 15.0                | 8.5  | ---- | 20.0    | 14.5 | ---- | 35.0     | 18.7 | ---- |
| Transient Cerebral Ischemia.....           | 23              | 4.3                 | 2.3  | ---- | 4.3     | 5.1  | ---- | 8.7      | 8.2  | ---- |
| Stroke.....                                | 58              | 22.4                | 22.9 | 6.4  | 25.9    | 30.6 | 8.7  | 32.8     | 34.7 | 10.7 |
| Hip Fracture.....                          | 33              | 6.1                 | 6.4  | ---- | 12.1    | 11.4 | ---- | 15.2     | 14.9 | ---- |
| Sepsis.....                                | 15              | 13.3                | 24.7 | ---- | 26.7    | 35.9 | ---- | 53.3     | 41.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 5               | 20.0                | 1.8  | ---- | 20.0    | 3.8  | ---- | 20.0     | 5.9  | ---- |
| Carotid Endarterectomy.....                | 10              | 0.0                 | 1.0  | ---- | 0.0     | 2.0  | ---- | 0.0      | 3.0  | ---- |
| Hip Replacement/Reconstruction.....        | 24              | 4.2                 | 4.5  | ---- | 12.5    | 8.5  | ---- | 16.7     | 11.7 | ---- |
| Open Reduction of Hip Fracture.....        | 19              | 10.5                | 5.7  | ---- | 21.1    | 10.7 | ---- | 21.1     | 14.3 | ---- |
| Prostatectomy.....                         | 28              | 0.0                 | 0.8  | ---- | 0.0     | 1.8  | ---- | 3.6      | 3.0  | ---- |
| Cholecystectomy.....                       | 33              | 3.0                 | 2.6  | ---- | 6.1     | 4.7  | ---- | 6.1      | 6.2  | ---- |
| Hysterectomy.....                          | 13              | 0.0                 | 0.5  | ---- | 0.0     | 1.2  | ---- | 0.0      | 1.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# OAKLAND GENERAL HOSPITAL

Medicare Provider Number: 230223

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.0 years  
Proportion female..... 58.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 19.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 20.0 %  
Admitted for emergency..... 78.7 %

### COMORBIDITIES:

Cancer..... 9.6 %  
Chronic cardiovascular disease..... 44.0 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 3.1 %  
Chronic pulmonary disease..... 22.8 %  
Cerebrovascular degeneration..... 4.4 %  
Diabetes mellitus..... 9.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 45.6%  
State ..... 53.0%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 166  
Occupancy Rate ..... 74.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 48.6 %  
Case Mix Index (CMI) ..... 1.2685

### STAFFING:

Total Number of Physicians..... 216  
Percent of Physicians Board  
Certified Specialists ..... 67.1 %  
Medical Residents/Interns ..... 49  
Registered Nurses ..... 223  
Licensed Practical Nurses ..... 23

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# OAKLAWN HOSPITAL

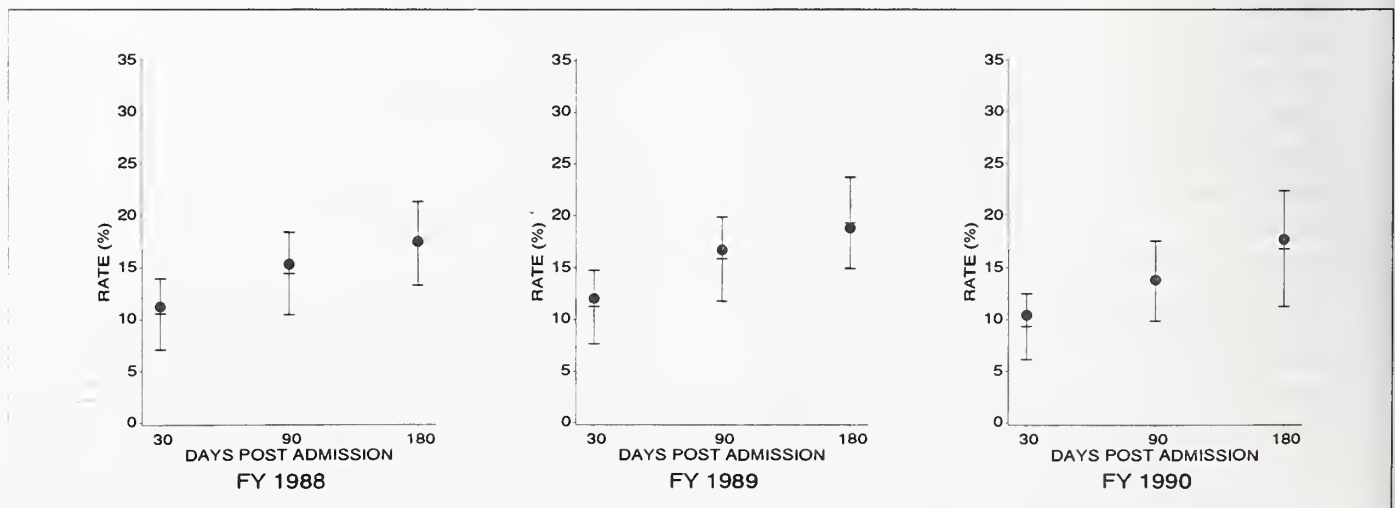
200 N MADISON  
MARSHALL, MI 49068  
Medicare Provider Number: 230217

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 385                | 10.4                | 9.3  | 1.6   | 13.8    | 13.7 | 1.9   | 17.7     | 16.8 | 2.8   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 12                 | 33.3                | 28.0 | ----- | 33.3    | 31.3 | ----- | 41.7     | 33.5 | ----- |
| Congestive Heart Failure.....              | 14                 | 28.6                | 16.2 | ----- | 42.9    | 26.0 | ----- | 42.9     | 33.1 | ----- |
| Pneumonia/Influenza.....                   | 30                 | 30.0                | 12.2 | ----- | 33.3    | 16.8 | ----- | 36.7     | 20.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 16                 | 6.3                 | 8.7  | ----- | 6.3     | 15.2 | ----- | 6.3      | 19.8 | ----- |
| Transient Cerebral Ischemia.....           | 7                  | 0.0                 | 1.9  | ----- | 0.0     | 4.3  | ----- | 0.0      | 7.1  | ----- |
| Stroke.....                                | 17                 | 11.8                | 17.6 | ----- | 11.8    | 24.0 | ----- | 29.4     | 28.0 | ----- |
| Hip Fracture.....                          | 6                  | 16.7                | 4.7  | ----- | 16.7    | 7.9  | ----- | 16.7     | 10.5 | ----- |
| Sepsis.....                                | 3                  | 0.0                 | 31.6 | ----- | 33.3    | 37.0 | ----- | 33.3     | 40.7 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1                  | 0.0                 | 2.8  | ----- | 0.0     | 5.1  | ----- | 0.0      | 7.5  | ----- |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 8                  | 0.0                 | 2.0  | ----- | 0.0     | 3.3  | ----- | 0.0      | 4.3  | ----- |
| Open Reduction of Hip Fracture.....        | 1                  | 0.0                 | 2.5  | ----- | 0.0     | 4.4  | ----- | 0.0      | 6.4  | ----- |
| Prostatectomy.....                         | 7                  | 0.0                 | 0.4  | ----- | 0.0     | 1.0  | ----- | 0.0      | 1.8  | ----- |
| Cholecystectomy.....                       | 9                  | 11.1                | 1.7  | ----- | 11.1    | 2.9  | ----- | 11.1     | 3.8  | ----- |
| Hysterectomy.....                          | 4                  | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# OAKLAWN HOSPITAL

Medicare Provider Number: 230217

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.9 years  
 Proportion female..... 59.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 47.8 %  
 Transferred from skilled nursing facility..... 0.3 %  
 Admitted for elective procedure..... 7.3 %  
 Admitted for emergency..... 49.1 %

### COMORBIDITIES:

Cancer..... 4.9 %  
 Chronic cardiovascular disease..... 36.1 %  
 Chronic liver disease..... 0.8 %  
 Chronic renal disease..... 1.3 %  
 Chronic pulmonary disease..... 15.3 %  
 Cerebrovascular degeneration..... 4.4 %  
 Diabetes mellitus..... 8.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 83.1%  
 State ..... 15.0%  
 Outside State ..... 1.9%  
 Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.0 Days  
 State ..... 8.5 Days  
 National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 77  
 Occupancy Rate ..... 24.0 %  
 Ownership/Control..... Private, Non-Profit  
 Medicare Discharges ..... 30.6 %  
 Case Mix Index (CMI) ..... 1.1217

### STAFFING:

Total Number of Physicians..... 24  
 Percent of Physicians Board  
 Certified Specialists..... 83.3 %  
 Medical Residents/Interns ..... 0  
 Registered Nurses..... 62  
 Licensed Practical Nurses ..... 14

### SPECIALTY SERVICES:

Burn Unit ..... No  
 Cardiac Intensive Care ..... No  
 Comprehensive Geriatric ..... No  
 Hospice Care ..... Yes  
 Medical/Surgical Intensive Care ..... Yes  
 Organ/Tissue Transplant ..... No  
 Other Intensive Care ..... No  
 Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
 Rehabilitation..... No  
 Psychiatric ..... No  
 Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# OAKWOOD DOWNRIVER MEDICAL CENTER

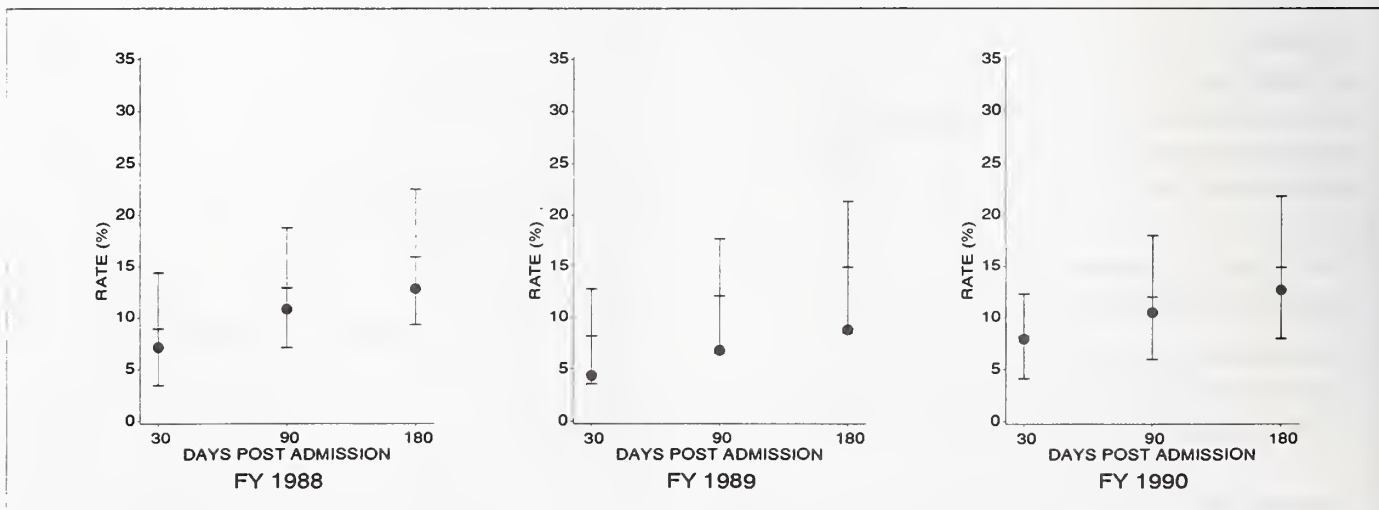
25750 WEST OUTER DRIVE  
LINCOLN PARK, MI 48146  
Medicare Provider Number: 230007

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 267             | 7.9                 | 8.2  | 2.1   | 10.5    | 12.0 | 3.0   | 12.7     | 14.9 | 3.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 12              | 16.7                | 22.4 | ----- | 16.7    | 25.0 | ----- | 16.7     | 27.7 | ----- |
| Congestive Heart Failure.....              | 24              | 25.0                | 16.0 | ----- | 29.2    | 25.1 | ----- | 33.3     | 31.3 | ----- |
| Pneumonia/Influenza.....                   | 10              | 20.0                | 18.7 | ----- | 30.0    | 25.3 | ----- | 40.0     | 29.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 8               | 0.0                 | 7.1  | ----- | 0.0     | 12.8 | ----- | 0.0      | 17.2 | ----- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.5  | ----- | 0.0     | 3.1  | ----- | 0.0      | 5.0  | ----- |
| Stroke.....                                | 7               | 14.3                | 16.3 | ----- | 14.3    | 21.6 | ----- | 14.3     | 25.0 | ----- |
| Hip Fracture.....                          | 1               | 0.0                 | 3.2  | ----- | 100.0   | 6.2  | ----- | 100.0    | 8.2  | ----- |
| Sepsis.....                                | 3               | 33.3                | 24.4 | ----- | 33.3    | 35.4 | ----- | 33.3     | 41.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 1               | 0.0                 | 2.9  | ----- | 100.0   | 5.9  | ----- | 100.0    | 7.9  | ----- |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 9               | 0.0                 | 0.6  | ----- | 11.1    | 1.5  | ----- | 11.1     | 2.6  | ----- |
| Cholecystectomy.....                       | 4               | 0.0                 | 1.1  | ----- | 0.0     | 2.0  | ----- | 0.0      | 2.5  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# OAKWOOD DOWNRIVER MEDICAL CENTER

Medicare Provider Number: 230007

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.9 years  
Proportion female..... 54.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 19.1 %  
Admitted for emergency..... 58.1 %

### COMORBIDITIES:

Cancer..... 4.5 %  
Chronic cardiovascular disease..... 39.7 %  
Chronic liver disease..... 1.5 %  
Chronic renal disease..... 2.6 %  
Chronic pulmonary disease..... 15.4 %  
Cerebrovascular degeneration..... 3.4 %  
Diabetes mellitus..... 15.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 95.7%  
State ..... 1.4%  
Outside State ..... 2.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.7 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 34  
Occupancy Rate ..... 61.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 34.5 %  
Case Mix Index (CMI) ..... 1.0984

### STAFFING:

Total Number of Physicians..... 85  
Percent of Physicians Board  
Certified Specialists ..... 80.0 %  
Medical Residents/Interns ..... 3  
Registered Nurses..... 24  
Licensed Practical Nurses ..... 12

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... Yes  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# OAKWOOD HOSPITAL

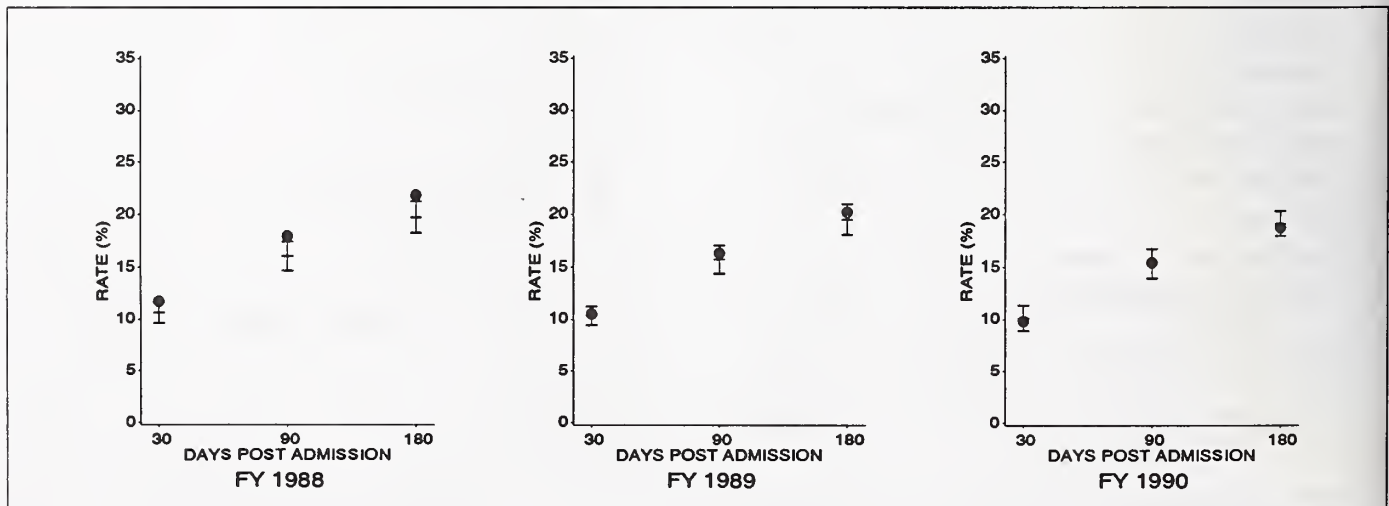
18101 OAKWOOD BLVD  
DEARBORN, MI 48124  
Medicare Provider Number: 230020

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 5240            | 9.8                 | 10.1 | 0.6   | 15.4    | 15.3 | 0.7   | 18.7     | 19.1 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 211             | 26.1                | 24.5 | 3.9   | 30.8    | 27.4 | 4.2   | 33.6     | 30.0 | 4.4   |
| Congestive Heart Failure.....              | 318             | 15.7                | 15.2 | 2.6   | 26.1    | 24.0 | 2.8   | 31.8     | 30.2 | 4.0   |
| Pneumonia/Influenza.....                   | 171             | 11.7                | 16.8 | 3.5   | 17.0    | 23.0 | 4.6   | 19.9     | 26.9 | 4.6   |
| Chronic Obstructive Pulmonary Disease..... | 67              | 9.0                 | 8.9  | 3.5   | 16.4    | 15.2 | 5.0   | 20.9     | 19.8 | 5.9   |
| Transient Cerebral Ischemia.....           | 103             | 0.0                 | 1.9  | 2.0   | 0.0     | 4.3  | 3.7   | 1.9      | 6.9  | 3.8   |
| Stroke.....                                | 237             | 12.2                | 18.7 | 3.4   | 18.6    | 25.4 | 3.4   | 22.8     | 29.1 | 3.4   |
| Hip Fracture.....                          | 103             | 5.8                 | 7.5  | 3.0   | 13.6    | 13.0 | 3.3   | 16.5     | 16.5 | 3.7   |
| Sepsis.....                                | 82              | 28.0                | 25.3 | 5.4   | 39.0    | 35.0 | 8.1   | 46.3     | 40.1 | 9.5   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 116             | 3.4                 | 3.4  | 1.7   | 5.2     | 4.1  | 2.0   | 6.0      | 5.0  | 2.5   |
| Coronary Artery Bypass Graft.....          | 208             | 4.3                 | 5.5  | 1.9   | 6.7     | 7.7  | 2.0   | 8.2      | 8.6  | 2.0   |
| Initial Pacemaker Insertion.....           | 48              | 2.1                 | 3.1  | ----- | 14.6    | 6.4  | ----- | 16.7     | 9.3  | ----- |
| Carotid Endarterectomy.....                | 45              | 2.2                 | 2.0  | ----- | 6.7     | 3.5  | ----- | 6.7      | 4.9  | ----- |
| Hip Replacement/Reconstruction.....        | 91              | 2.2                 | 3.1  | 2.0   | 2.2     | 5.7  | 3.4   | 5.5      | 7.7  | 3.8   |
| Open Reduction of Hip Fracture.....        | 60              | 3.3                 | 6.8  | 4.7   | 13.3    | 12.2 | 5.1   | 15.0     | 15.7 | 5.0   |
| Prostatectomy.....                         | 177             | 1.7                 | 0.9  | 1.1   | 2.8     | 2.1  | 1.2   | 4.5      | 3.6  | 1.6   |
| Cholecystectomy.....                       | 114             | 5.3                 | 3.8  | 3.8   | 7.9     | 6.7  | 4.7   | 9.6      | 8.5  | 4.9   |
| Hysterectomy.....                          | 69              | 0.0                 | 0.8  | 1.3   | 2.9     | 1.9  | 2.3   | 2.9      | 3.0  | 2.2   |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# OAKWOOD HOSPITAL

Medicare Provider Number: 230020

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.4 years  
Proportion female..... 55.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 31.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 16.7 %  
Admitted for emergency..... 63.8 %

### COMORBIDITIES:

Cancer..... 9.1 %  
Chronic cardiovascular disease..... 48.5 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 4.5 %  
Chronic pulmonary disease..... 17.2 %  
Cerebrovascular degeneration..... 3.8 %  
Diabetes mellitus..... 7.9 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 95.2%  
State ..... 3.2%  
Outside State ..... 1.6%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 615  
Occupancy Rate ..... 77.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.7 %  
Case Mix Index (CMI) ..... 1.4836

### STAFFING:

Total Number of Physicians..... 394  
Percent of Physicians Board  
Certified Specialists ..... 77.7 %  
Medical Residents/Interns ..... 83  
Registered Nurses..... 560  
Licensed Practical Nurses ..... 75

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

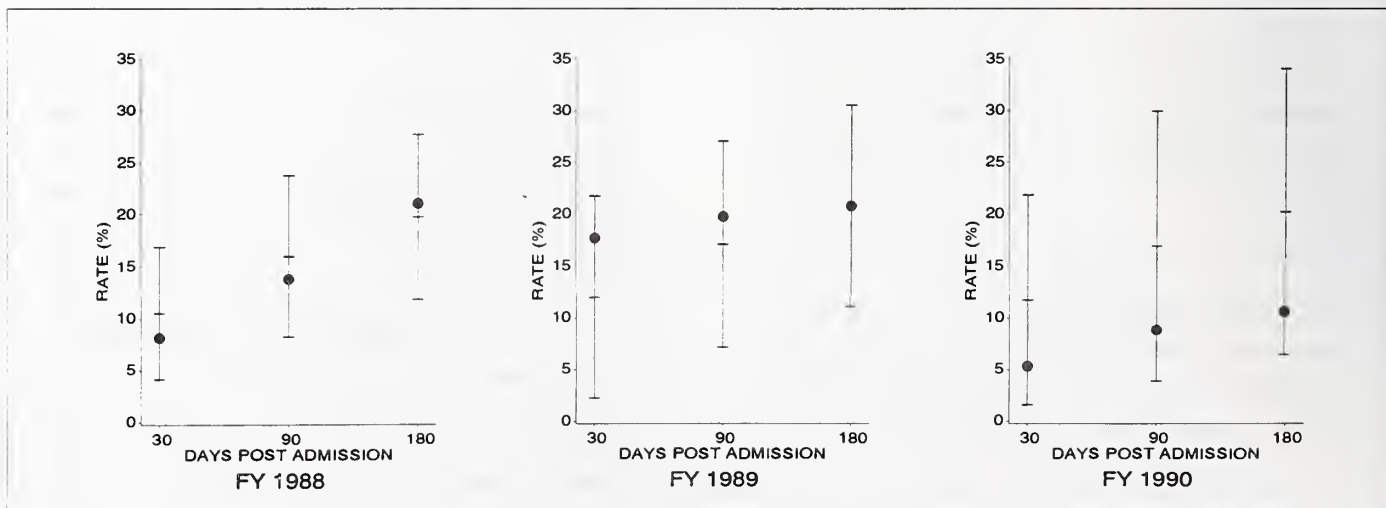
**OCEANA HOSPITAL**  
611 E MAIN ST  
HART, MI 49420  
Medicare Provider Number: 230051

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 57                 | 5.3                 | 11.7 | 5.1   | 8.8     | 16.9 | 6.5   | 10.5     | 20.2 | 7.0   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 2                  | 0.0                 | 26.0 | ----- | 0.0     | 29.5 | ----- | 0.0      | 32.9 | ----- |
| Congestive Heart Failure.....              | 3                  | 0.0                 | 13.9 | ----- | 0.0     | 22.1 | ----- | 0.0      | 28.9 | ----- |
| Pneumonia/Influenza.....                   | 7                  | 0.0                 | 16.9 | ----- | 0.0     | 22.9 | ----- | 0.0      | 26.3 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 2                  | 0.0                 | 2.8  | ----- | 0.0     | 5.9  | ----- | 0.0      | 9.1  | ----- |
| Stroke.....                                | 1                  | 0.0                 | 29.1 | ----- | 0.0     | 34.3 | ----- | 0.0      | 36.8 | ----- |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 1                  | 0.0                 | 2.0  | ----- | 0.0     | 3.3  | ----- | 0.0      | 4.1  | ----- |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





# OCEANA HOSPITAL

Medicare Provider Number: 230051

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.1 years  
Proportion female..... 60.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 96.6 %

### COMORBIDITIES:

Cancer..... 3.4 %  
Chronic cardiovascular disease..... 51.7 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 3.4 %  
Chronic pulmonary disease..... 19.0 %  
Cerebrovascular degeneration..... 5.2 %  
Diabetes mellitus..... 20.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 82.6 %  
State..... 17.4 %  
Outside State..... 0.0 %  
Total..... 100.0 %

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 4.9 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 36  
Occupancy Rate..... 2.8 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... (Not Available)  
Case Mix Index (CMI)..... 0.9701

### STAFFING:

Total Number of Physicians..... (Not Available)  
Percent of Physicians Board  
Certified Specialists..... (Not Available)  
Medical Residents/Interns..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... No  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ONTONAGON MEMORIAL HOSPITAL

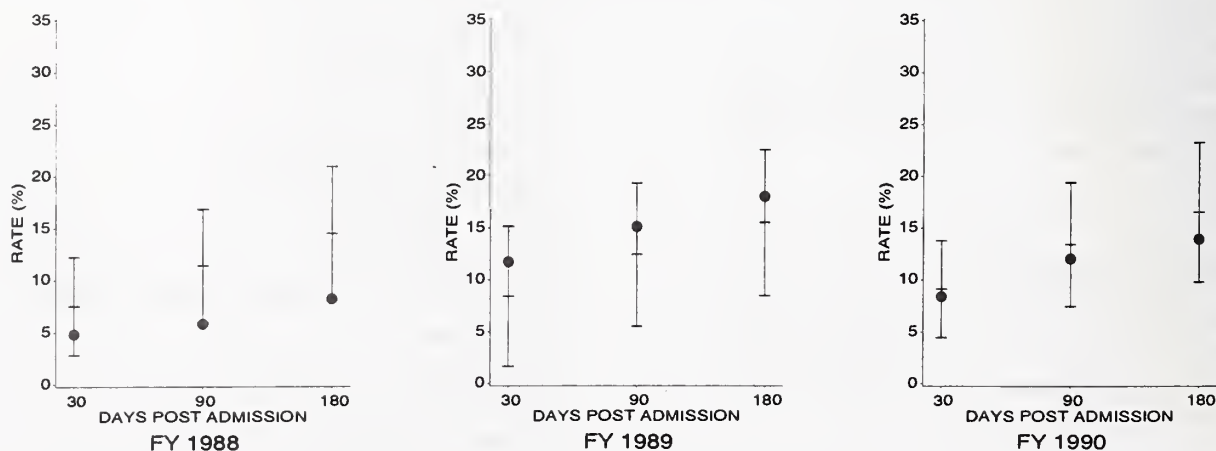
601 7TH ST  
ONTONAGON, MI 49953  
Medicare Provider Number: 230219

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 166             | 8.4                 | 9.1  | 2.3   | 12.0    | 13.4 | 3.0   | 13.9     | 16.5 | 3.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 5               | 60.0                | 30.9 | ----- | 60.0    | 34.7 | ----- | 60.0     | 38.3 | ----- |
| Congestive Heart Failure.....              | 17              | 11.8                | 13.3 | ----- | 17.6    | 20.2 | ----- | 29.4     | 26.3 | ----- |
| Pneumonia/Influenza.....                   | 9               | 0.0                 | 10.8 | ----- | 0.0     | 14.2 | ----- | 0.0      | 16.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 2               | 0.0                 | 15.9 | ----- | 0.0     | 24.3 | ----- | 0.0      | 28.8 | ----- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 0.8  | ----- | 0.0     | 2.0  | ----- | 0.0      | 3.3  | ----- |
| Stroke.....                                | 11              | 18.2                | 21.8 | ----- | 18.2    | 28.4 | ----- | 18.2     | 32.3 | ----- |
| Hip Fracture.....                          | 0               |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0               |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 4               | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.8  | ----- |
| Cholecystectomy.....                       | 1               | 0.0                 | 3.5  | ----- | 0.0     | 8.4  | ----- | 0.0      | 13.4 | ----- |
| Hysterectomy.....                          | 0               |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ONTONAGON MEMORIAL HOSPITAL

Medicare Provider Number: 230219

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.0 years

Proportion female..... 59.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.6 %

Transferred from skilled nursing facility..... 1.2 %

Admitted for elective procedure..... 3.0 %

Admitted for emergency..... 12.0 %

### COMORBIDITIES:

Cancer..... 5.4 %

Chronic cardiovascular disease..... 29.5 %

Chronic liver disease..... 1.8 %

Chronic renal disease..... 0.6 %

Chronic pulmonary disease..... 13.3 %

Cerebrovascular degeneration..... 2.4 %

Diabetes mellitus..... 10.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.3%

State ..... 5.1%

Outside State ..... 1.6%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 87

Occupancy Rate ..... 59.0 %

Ownership/Control..... Local Government

Medicare Discharges ..... 46.2 %

Case Mix Index (CMI) ..... 0.9022

### STAFFING:

Total Number of Physicians..... 6

Percent of Physicians Board  
Certified Specialists ..... 33.3 %

Medical Residents/Interns ..... 0

Registered Nurses..... 10

Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# OTSEGO COUNTY MEMORIAL HOSPITAL

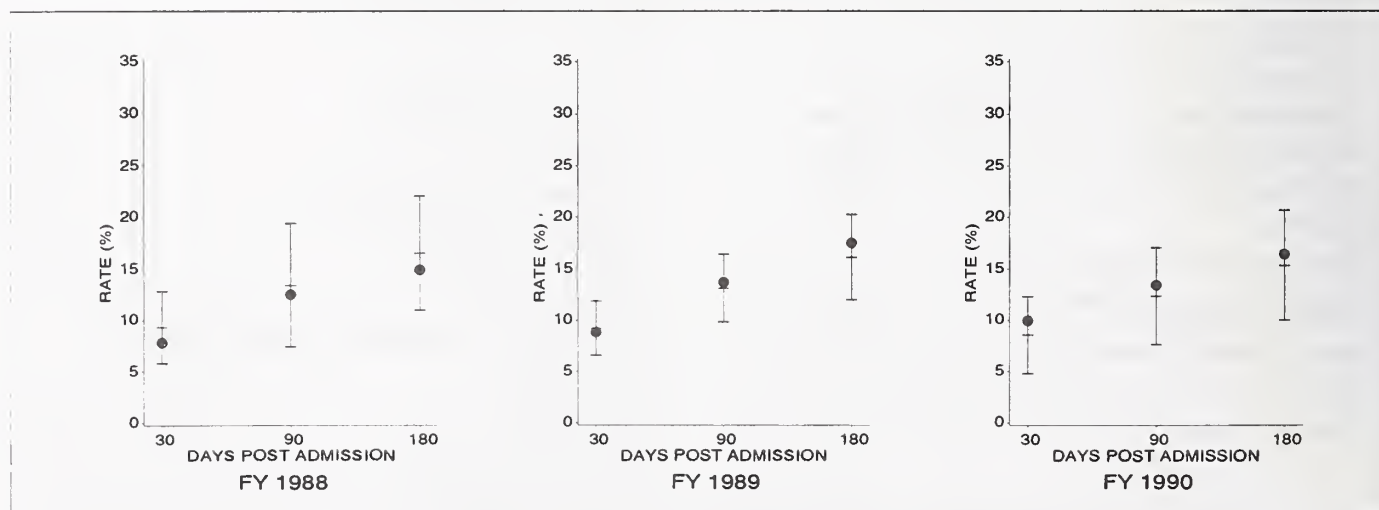
825 N CENTER ST  
GAYLORD, MI 49735  
Medicare Provider Number: 230133

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 537             | 9.9                 | 8.5  | 1.9   | 13.4    | 12.3 | 2.4   | 16.4     | 15.3 | 2.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 31              | 19.4                | 25.1 | ----- | 19.4    | 27.4 | ----- | 19.4     | 29.8 | ----- |
| Congestive Heart Failure.....              | 36              | 13.9                | 14.8 | ----- | 16.7    | 23.5 | ----- | 27.8     | 30.0 | ----- |
| Pneumonia/Influenza.....                   | 19              | 15.8                | 17.4 | ----- | 21.1    | 23.6 | ----- | 26.3     | 27.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 4.5  | ----- | 0.0     | 9.0  | ----- | 14.3     | 12.9 | ----- |
| Transient Cerebral Ischemia.....           | 11              | 0.0                 | 2.2  | ----- | 9.1     | 5.1  | ----- | 9.1      | 8.0  | ----- |
| Stroke.....                                | 24              | 29.2                | 21.8 | ----- | 41.7    | 27.3 | ----- | 45.8     | 31.2 | ----- |
| Hip Fracture.....                          | 17              | 29.4                | 7.1  | ----- | 29.4    | 12.2 | ----- | 35.3     | 15.8 | ----- |
| Sepsis.....                                | 2               | 50.0                | 41.8 | ----- | 100.0   | 60.5 | ----- | 100.0    | 67.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 0.0                 | 2.4  | ----- | 0.0     | 4.1  | ----- | 0.0      | 6.2  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 9               | 0.0                 | 4.2  | ----- | 0.0     | 7.2  | ----- | 0.0      | 9.1  | ----- |
| Open Reduction of Hip Fracture.....        | 12              | 41.7                | 6.6  | ----- | 41.7    | 11.6 | ----- | 50.0     | 15.3 | ----- |
| Prostatectomy.....                         | 29              | 0.0                 | 0.7  | ----- | 0.0     | 1.4  | ----- | 0.0      | 2.4  | ----- |
| Cholecystectomy.....                       | 10              | 0.0                 | 1.2  | ----- | 0.0     | 2.1  | ----- | 0.0      | 2.7  | ----- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.0  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# OTSEGO COUNTY MEMORIAL HOSPITAL

Medicare Provider Number: 230133

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.5 years  
Proportion female..... 50.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 41.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 40.8 %  
Admitted for emergency..... 58.1 %

### COMORBIDITIES:

Cancer..... 4.3 %  
Chronic cardiovascular disease..... 41.7 %  
Chronic liver disease..... 2.2 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 14.3 %  
Cerebrovascular degeneration..... 1.9 %  
Diabetes mellitus..... 5.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 49.3%  
State ..... 47.9%  
Outside State ..... 2.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.6 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 111  
Occupancy Rate ..... 64.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.4 %  
Case Mix Index (CMI) ..... 1.1139

### STAFFING:

Total Number of Physicians..... 29  
Percent of Physicians Board  
Certified Specialists ..... 62.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 43  
Licensed Practical Nurses ..... 16

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... Yes  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# OUTER DRIVE HOSPITAL

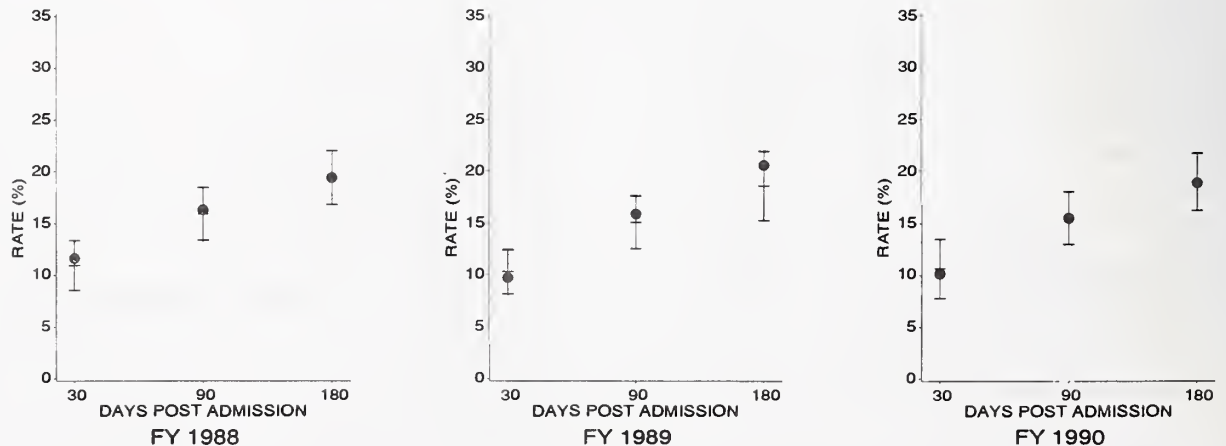
26400 OUTER DR  
LINCOLN PARK, MI 48146  
Medicare Provider Number: 230140

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 831             | 10.1                | 10.6 | 1.4  | 15.5    | 15.5 | 1.3  | 18.9     | 19.0 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 32              | 25.0                | 25.6 | ---- | 34.4    | 28.9 | ---- | 37.5     | 31.8 | ---- |
| Congestive Heart Failure.....              | 78              | 16.7                | 14.5 | 4.2  | 23.1    | 23.2 | 5.2  | 26.9     | 29.5 | 5.6  |
| Pneumonia/Influenza.....                   | 35              | 17.1                | 15.5 | ---- | 25.7    | 21.6 | ---- | 28.6     | 25.7 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 21              | 0.0                 | 9.3  | ---- | 4.8     | 15.7 | ---- | 9.5      | 20.3 | ---- |
| Transient Cerebral Ischemia.....           | 21              | 0.0                 | 1.6  | ---- | 14.3    | 3.6  | ---- | 23.8     | 5.8  | ---- |
| Stroke.....                                | 52              | 13.5                | 17.0 | 6.1  | 19.2    | 23.7 | 7.3  | 25.0     | 27.3 | 6.5  |
| Hip Fracture.....                          | 18              | 5.6                 | 5.4  | ---- | 5.6     | 9.6  | ---- | 5.6      | 12.4 | ---- |
| Sepsis.....                                | 23              | 21.7                | 27.2 | ---- | 43.5    | 37.3 | ---- | 43.5     | 42.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 2.2  | ---- | 0.0     | 5.8  | ---- | 0.0      | 10.3 | ---- |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 1.1  | ---- | 0.0     | 2.2  | ---- | 0.0      | 3.0  | ---- |
| Open Reduction of Hip Fracture.....        | 13              | 7.7                 | 5.3  | ---- | 7.7     | 9.4  | ---- | 7.7      | 12.3 | ---- |
| Prostatectomy.....                         | 19              | 0.0                 | 1.5  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.3  | ---- |
| Cholecystectomy.....                       | 15              | 0.0                 | 3.9  | ---- | 0.0     | 7.4  | ---- | 6.7      | 9.6  | ---- |
| Hysterectomy.....                          | 2               | 0.0                 | 1.2  | ---- | 0.0     | 3.0  | ---- | 0.0      | 4.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# OUTER DRIVE HOSPITAL

Medicare Provider Number: 230140

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.2 years  
Proportion female..... 57.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 25.0 %  
Transferred from skilled nursing facility..... 0.5 %  
Admitted for elective procedure..... 13.5 %  
Admitted for emergency..... 75.5 %

### COMORBIDITIES:

Cancer..... 4.0 %  
Chronic cardiovascular disease..... 40.7 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 4.3 %  
Chronic pulmonary disease..... 17.1 %  
Cerebrovascular degeneration..... 4.1 %  
Diabetes mellitus..... 12.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 97.4%  
State ..... 1.4%  
Outside State ..... 1.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 253  
Ownership/Control..... District/Authority  
Case Mix Index (CMI) ..... 1.1583

### STAFFING:

Medical Residents/Interns ..... 1  
Registered Nurses..... 112  
Licensed Practical Nurses..... 38

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# PAUL OLIVER MEMORIAL HOSPITAL

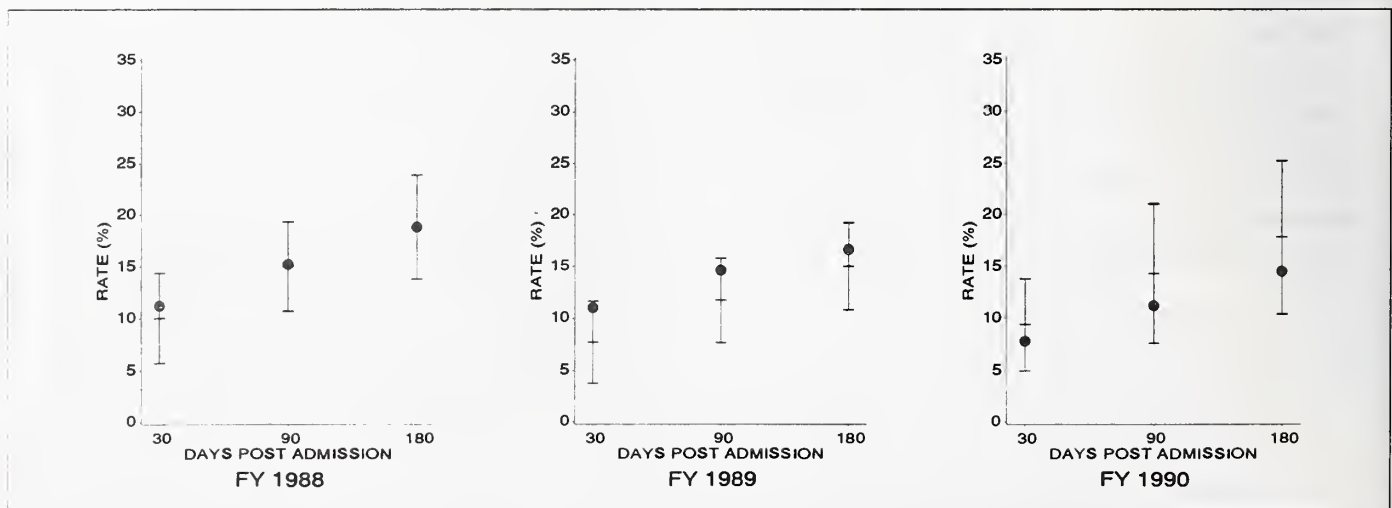
224 PARK AVE  
FRANKFORT, MI 49635  
Medicare Provider Number: 230062

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 269             | 7.8                 | 9.4  | 2.2   | 11.2    | 14.3 | 3.4   | 14.5     | 17.8 | 3.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 7               | 14.3                | 20.5 | ----- | 14.3    | 23.5 | ----- | 14.3     | 26.7 | ----- |
| Congestive Heart Failure.....              | 18              | 16.7                | 15.1 | ----- | 16.7    | 24.6 | ----- | 16.7     | 31.3 | ----- |
| Pneumonia/Influenza.....                   | 21              | 9.5                 | 15.3 | ----- | 9.5     | 20.9 | ----- | 19.0     | 24.8 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 2.8  | ----- | 0.0     | 5.9  | ----- | 0.0      | 9.1  | ----- |
| Transient Cerebral Ischemia.....           | 4               | 0.0                 | 0.9  | ----- | 0.0     | 2.0  | ----- | 0.0      | 3.5  | ----- |
| Stroke.....                                | 8               | 12.5                | 20.9 | ----- | 12.5    | 28.2 | ----- | 37.5     | 32.6 | ----- |
| Hip Fracture.....                          | 18              | 0.0                 | 6.7  | ----- | 5.6     | 11.9 | ----- | 5.6      | 15.3 | ----- |
| Sepsis.....                                | 1               | 0.0                 | 49.5 | ----- | 0.0     | 54.5 | ----- | 0.0      | 57.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 1               | 100.0               | 2.9  | ----- | 100.0   | 5.8  | ----- | 100.0    | 8.0  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 4               | 0.0                 | 5.8  | ----- | 0.0     | 9.8  | ----- | 0.0      | 13.2 | ----- |
| Open Reduction of Hip Fracture.....        | 10              | 0.0                 | 5.5  | ----- | 10.0    | 10.2 | ----- | 10.0     | 13.4 | ----- |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 5               | 0.0                 | 1.5  | ----- | 0.0     | 2.9  | ----- | 0.0      | 3.8  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.2  | ----- | 0.0     | 0.4  | ----- | 0.0      | 0.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# PAUL OLIVER MEMORIAL HOSPITAL

Medicare Provider Number: 230062

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.5 years |
| Proportion female.....        | 56.5 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 95.2 % |
| Transferred from skilled nursing facility..... | 0.4 %  |
| Admitted for elective procedure.....           | 6.3 %  |
| Admitted for emergency.....                    | 78.4 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.8 %  |
| Chronic cardiovascular disease..... | 35.7 % |
| Chronic liver disease.....          | 1.5 %  |
| Chronic renal disease.....          | 3.7 %  |
| Chronic pulmonary disease.....      | 10.4 % |
| Cerebrovascular degeneration.....   | 5.6 %  |
| Diabetes mellitus.....              | 13.4 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 69.1%  |
| State .....         | 24.5%  |
| Outside State ..... | 6.4%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.4 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 48                  |
| Occupancy Rate .....       | 62.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 60.9 %              |
| Case Mix Index (CMI) ..... | 1.0551              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 16     |
| Percent of Physicians Board<br>Certified Specialists..... | 68.8 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 28     |
| Licensed Practical Nurses .....                           | 9      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug.....         | No  |
| Rehabilitation.....       | No  |
| Psychiatric.....          | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# PAWATING HOSPITAL

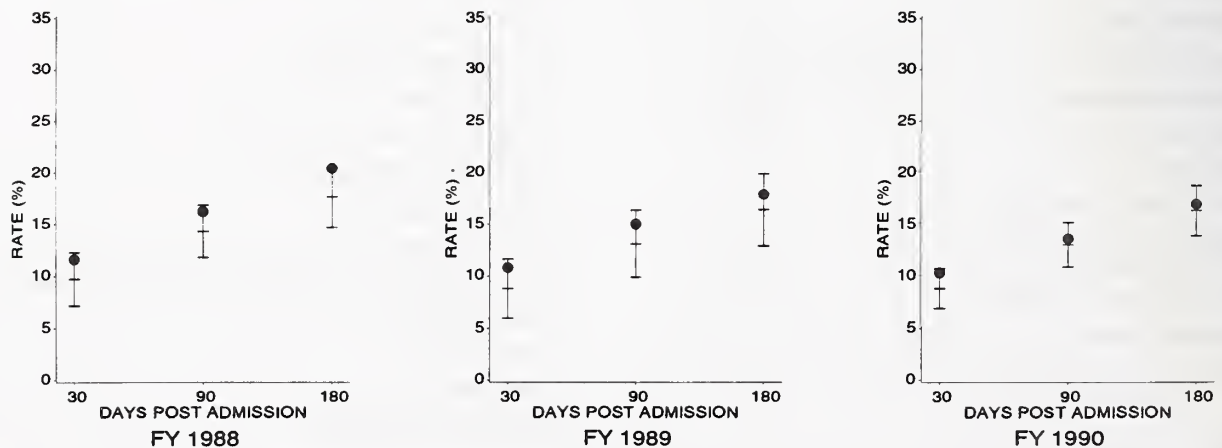
31 NORTH ST JOSEPH  
NILES, MI 49120  
Medicare Provider Number: 230137

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1112            | 10.3                | 8.8  | 1.0  | 13.6    | 13.0 | 1.1  | 16.9     | 16.3 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 32              | 34.4                | 30.4 | ---- | 40.6    | 33.4 | ---- | 46.9     | 35.9 | ---- |
| Congestive Heart Failure.....              | 71              | 14.1                | 14.1 | 5.3  | 19.7    | 21.6 | 7.2  | 23.9     | 27.5 | 6.5  |
| Pneumonia/Influenza.....                   | 86              | 16.3                | 13.9 | 4.5  | 20.9    | 19.2 | 4.5  | 26.7     | 22.7 | 4.9  |
| Chronic Obstructive Pulmonary Disease..... | 19              | 5.3                 | 7.8  | ---- | 5.3     | 12.5 | ---- | 15.8     | 16.2 | ---- |
| Transient Cerebral Ischemia.....           | 23              | 0.0                 | 1.8  | ---- | 0.0     | 4.3  | ---- | 0.0      | 7.2  | ---- |
| Stroke.....                                | 51              | 23.5                | 17.1 | 8.6  | 29.4    | 24.9 | 8.2  | 37.3     | 29.2 | 8.2  |
| Hip Fracture.....                          | 30              | 3.3                 | 6.2  | ---- | 3.3     | 10.7 | ---- | 3.3      | 13.8 | ---- |
| Sepsis.....                                | 12              | 25.0                | 25.6 | ---- | 33.3    | 31.5 | ---- | 41.7     | 35.5 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 7               | 0.0                 | 1.7  | ---- | 0.0     | 3.7  | ---- | 0.0      | 5.7  | ---- |
| Carotid Endarterectomy.....                | 2               | 0.0                 | 2.0  | ---- | 0.0     | 3.9  | ---- | 0.0      | 5.8  | ---- |
| Hip Replacement/Reconstruction.....        | 16              | 0.0                 | 2.4  | ---- | 0.0     | 4.5  | ---- | 0.0      | 6.2  | ---- |
| Open Reduction of Hip Fracture.....        | 14              | 7.1                 | 6.9  | ---- | 7.1     | 12.6 | ---- | 7.1      | 16.4 | ---- |
| Prostatectomy.....                         | 51              | 2.0                 | 0.9  | 1.5  | 3.9     | 2.1  | 2.9  | 5.9      | 3.7  | 4.7  |
| Cholecystectomy.....                       | 18              | 0.0                 | 1.4  | ---- | 0.0     | 2.7  | ---- | 0.0      | 3.7  | ---- |
| Hysterectomy.....                          | 14              | 0.0                 | 0.2  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# PAWATING HOSPITAL

Medicare Provider Number: 230137

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 58.2 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 59.9 %

### COMORBIDITIES:

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 33.6 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 1.8 %  
Chronic pulmonary disease..... 13.8 %  
Cerebrovascular degeneration..... 3.0 %  
Diabetes mellitus..... 11.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 79.1 %  
State ..... 17.8 %  
Outside State ..... 3.1 %  
Total ..... 100.0 %

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 106  
Occupancy Rate ..... 47.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 44.8 %  
Case Mix Index (CMI) ..... 1.0678

### STAFFING:

Total Number of Physicians..... 39  
Percent of Physicians Board  
Certified Specialists..... 66.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 96  
Licensed Practical Nurses..... 8

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

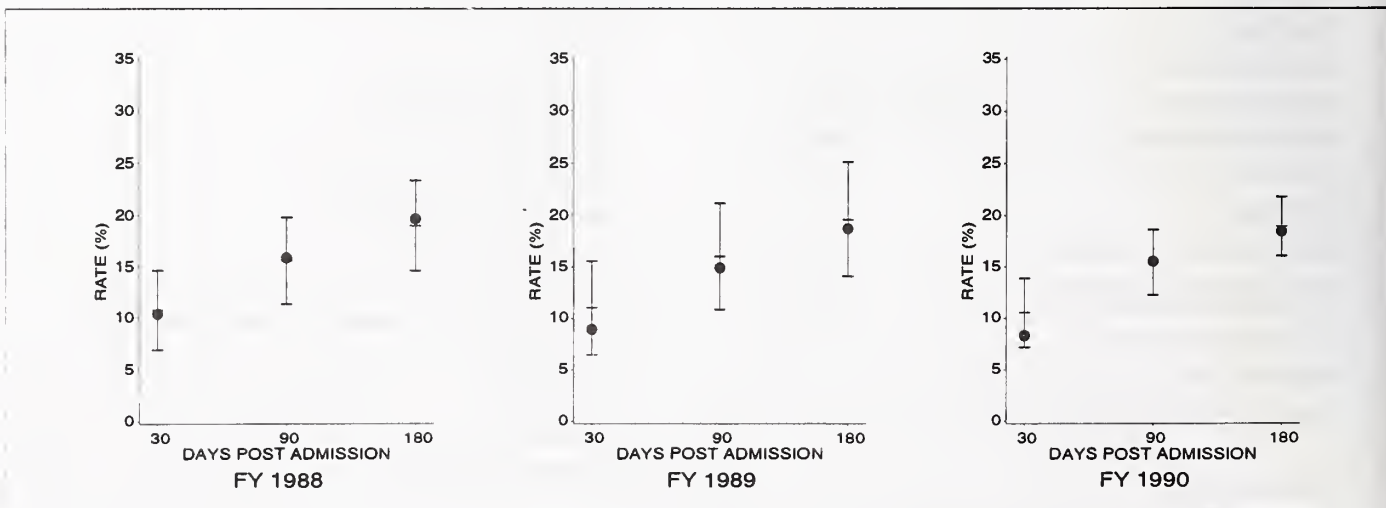
**PENNOCK HOSPITAL**  
1009 W GREEN ST  
HASTINGS, MI 49058  
Medicare Provider Number: 230040

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 767                | 8.3                 | 10.5 | 1.7   | 15.5    | 15.4 | 1.6   | 18.4     | 18.9 | 1.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 25                 | 4.0                 | 24.9 | ----- | 12.0    | 28.9 | ----- | 20.0     | 32.1 | ----- |
| Congestive Heart Failure.....              | 52                 | 9.6                 | 15.2 | 6.6   | 28.8    | 23.7 | 7.1   | 32.7     | 29.9 | 6.6   |
| Pneumonia/Influenza.....                   | 57                 | 5.3                 | 16.8 | 6.6   | 10.5    | 22.8 | 7.5   | 12.3     | 26.9 | 8.0   |
| Chronic Obstructive Pulmonary Disease..... | 12                 | 8.3                 | 3.1  | ----- | 16.7    | 6.0  | ----- | 16.7     | 9.0  | ----- |
| Transient Cerebral Ischemia.....           | 5                  | 0.0                 | 4.6  | ----- | 20.0    | 8.9  | ----- | 20.0     | 12.9 | ----- |
| Stroke.....                                | 20                 | 10.0                | 19.9 | ----- | 25.0    | 25.7 | ----- | 25.0     | 29.3 | ----- |
| Hip Fracture.....                          | 26                 | 7.7                 | 8.3  | ----- | 19.2    | 14.3 | ----- | 23.1     | 18.0 | ----- |
| Sepsis.....                                | 29                 | 20.7                | 33.2 | ----- | 34.5    | 40.0 | ----- | 37.9     | 45.1 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 20                 | 5.0                 | 4.3  | ----- | 10.0    | 7.8  | ----- | 15.0     | 10.4 | ----- |
| Open Reduction of Hip Fracture.....        | 13                 | 7.7                 | 8.4  | ----- | 23.1    | 14.8 | ----- | 23.1     | 18.5 | ----- |
| Prostatectomy.....                         | 23                 | 0.0                 | 0.9  | ----- | 0.0     | 2.4  | ----- | 0.0      | 4.2  | ----- |
| Cholecystectomy.....                       | 15                 | 6.7                 | 2.3  | ----- | 6.7     | 4.4  | ----- | 6.7      | 6.0  | ----- |
| Hysterectomy.....                          | 7                  | 0.0                 | 0.7  | ----- | 0.0     | 1.8  | ----- | 0.0      | 3.1  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**PENNOCK HOSPITAL**  
Medicare Provider Number: 230040

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.2 years  
Proportion female..... 55.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 36.9 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 13.7 %  
Admitted for emergency..... 61.8 %

**COMORBIDITIES:**

Cancer..... 7.0 %  
Chronic cardiovascular disease..... 42.4 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 22.3 %  
Cerebrovascular degeneration..... 3.0 %  
Diabetes mellitus..... 10.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 71.5%  
State ..... 26.0%  
Outside State ..... 2.5%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 7.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 91  
Occupancy Rate ..... 46.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 40.1 %  
Case Mix Index (CMI) ..... 1.2401

**STAFFING:**

Total Number of Physicians..... 65  
Percent of Physicians Board  
Certified Specialists..... 75.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 67  
Licensed Practical Nurses ..... 20

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# PIPP COMMUNITY HOSPITAL

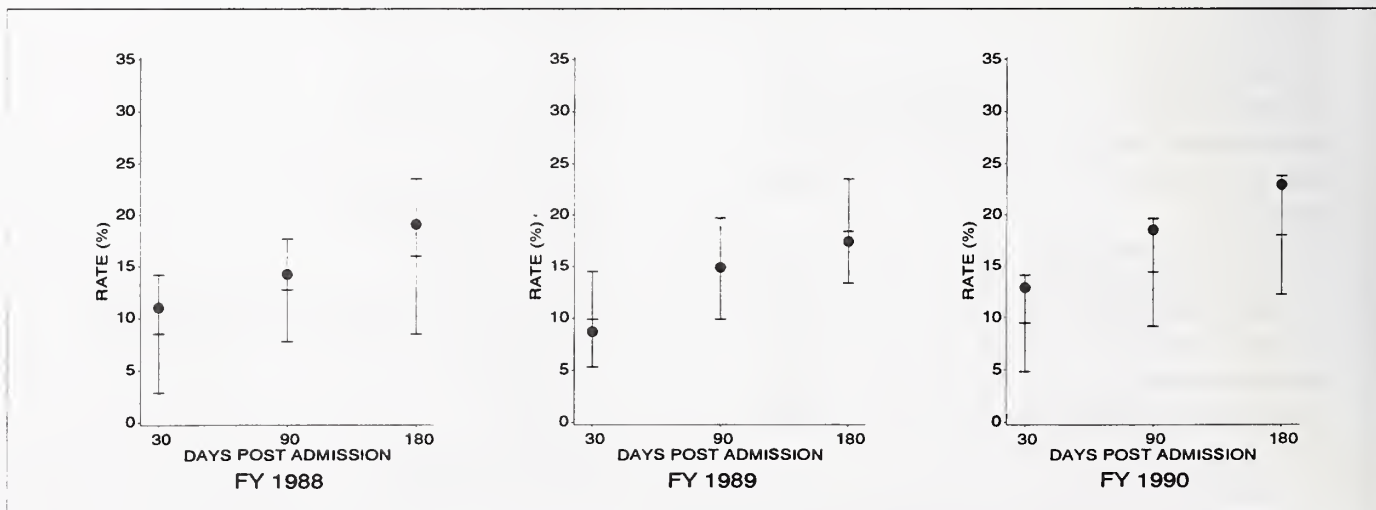
411 NAOMU ST  
PLAINWELL, MI 49080  
Medicare Provider Number: 230134

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 249                | 12.9                | 9.5  | 2.3  | 18.5    | 14.4 | 2.6  | 22.9     | 18.0 | 2.9  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 4                  | 25.0                | 29.0 | ---- | 50.0    | 35.5 | ---- | 50.0     | 41.2 | ---- |
| Congestive Heart Failure.....              | 17                 | 11.8                | 12.9 | ---- | 11.8    | 20.3 | ---- | 23.5     | 25.9 | ---- |
| Pneumonia/Influenza.....                   | 49                 | 22.4                | 16.8 | ---- | 26.5    | 23.3 | ---- | 32.7     | 27.5 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 10                 | 10.0                | 4.2  | ---- | 10.0    | 7.8  | ---- | 10.0     | 11.3 | ---- |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 8                  | 25.0                | 19.6 | ---- | 25.0    | 27.4 | ---- | 25.0     | 32.4 | ---- |
| Hip Fracture.....                          | 17                 | 17.6                | 7.6  | ---- | 23.5    | 13.9 | ---- | 29.4     | 18.9 | ---- |
| Sepsis.....                                | 1                  | 0.0                 | 11.6 | ---- | 100.0   | 16.7 | ---- | 100.0    | 20.0 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 6                  | 0.0                 | 6.4  | ---- | 16.7    | 12.1 | ---- | 16.7     | 16.8 | ---- |
| Open Reduction of Hip Fracture.....        | 8                  | 25.0                | 8.4  | ---- | 25.0    | 15.5 | ---- | 37.5     | 20.7 | ---- |
| Prostatectomy.....                         | 2                  | 0.0                 | 0.7  | ---- | 0.0     | 1.2  | ---- | 0.0      | 1.8  | ---- |
| Cholecystectomy.....                       | 4                  | 0.0                 | 0.4  | ---- | 0.0     | 0.8  | ---- | 0.0      | 1.2  | ---- |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm$ 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# PIPP COMMUNITY HOSPITAL

Medicare Provider Number: 230134

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 77.5 years |
| Proportion female.....        | 57.0 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 41.0 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 77.9 % |
| Admitted for emergency.....                    | 20.9 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 2.8 %  |
| Chronic cardiovascular disease..... | 32.5 % |
| Chronic liver disease.....          | 0.4 %  |
| Chronic renal disease.....          | 4.4 %  |
| Chronic pulmonary disease.....      | 14.5 % |
| Cerebrovascular degeneration.....   | 3.2 %  |
| Diabetes mellitus.....              | 12.0 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 79.8%  |
| State.....          | 19.6%  |
| Outside State ..... | 0.6%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 5.7 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 43                  |
| Occupancy Rate .....       | 25.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 40.6 %              |
| Case Mix Index (CMI) ..... | 1.1000              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 9      |
| Percent of Physicians Board<br>Certified Specialists..... | 55.6 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 20     |
| Licensed Practical Nurses .....                           | 16     |

### SPECIALTY SERVICES:

|                                       |    |
|---------------------------------------|----|
| Burn Unit .....                       | No |
| Cardiac Intensive Care .....          | No |
| Comprehensive Geriatric .....         | No |
| Hospice Care .....                    | No |
| Medical/Surgical Intensive Care ..... | No |
| Organ/Tissue Transplant .....         | No |
| Other Intensive Care .....            | No |
| Trauma Center .....                   | No |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug.....         | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# PONTIAC OSTEOPATHIC HOSPITAL

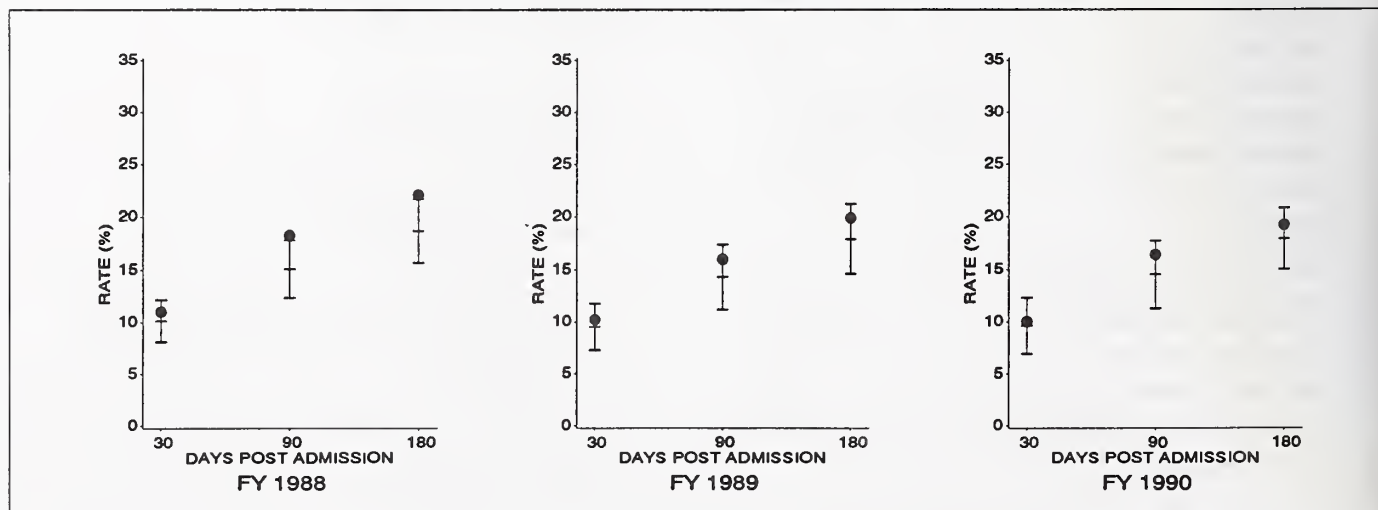
50 NORTH PERRY  
PONTIAC, MI 48058  
Medicare Provider Number: 230207

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1118            | 10.0                | 9.6  | 1.4   | 16.4    | 14.5 | 1.6   | 19.2     | 17.9 | 1.5   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 38              | 39.5                | 22.5 | ----- | 42.1    | 25.3 | ----- | 42.1     | 28.0 | ----- |
| Congestive Heart Failure.....              | 89              | 16.9                | 13.9 | 4.3   | 30.3    | 22.3 | 6.5   | 36.0     | 28.4 | 6.5   |
| Pneumonia/Influenza.....                   | 53              | 11.3                | 17.3 | 6.9   | 18.9    | 23.3 | 6.5   | 26.4     | 27.5 | 6.3   |
| Chronic Obstructive Pulmonary Disease..... | 14              | 7.1                 | 12.9 | ----- | 7.1     | 21.1 | ----- | 7.1      | 26.0 | ----- |
| Transient Cerebral Ischemia.....           | 27              | 0.0                 | 2.1  | ----- | 3.7     | 4.3  | ----- | 3.7      | 6.6  | ----- |
| Stroke.....                                | 47              | 19.1                | 21.2 | ----- | 23.4    | 27.6 | ----- | 23.4     | 31.1 | ----- |
| Hip Fracture.....                          | 28              | 14.3                | 6.7  | ----- | 21.4    | 11.3 | ----- | 25.0     | 14.5 | ----- |
| Sepsis.....                                | 8               | 37.5                | 28.7 | ----- | 37.5    | 35.6 | ----- | 37.5     | 39.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 9               | 0.0                 | 2.4  | ----- | 0.0     | 5.1  | ----- | 0.0      | 7.9  | ----- |
| Carotid Endarterectomy.....                | 1               | 0.0                 | 0.9  | ----- | 0.0     | 1.9  | ----- | 0.0      | 2.9  | ----- |
| Hip Replacement/Reconstruction.....        | 14              | 0.0                 | 3.2  | ----- | 14.3    | 5.7  | ----- | 14.3     | 7.5  | ----- |
| Open Reduction of Hip Fracture.....        | 19              | 15.8                | 5.8  | ----- | 15.8    | 9.9  | ----- | 21.1     | 13.1 | ----- |
| Prostatectomy.....                         | 25              | 0.0                 | 0.7  | ----- | 4.0     | 1.6  | ----- | 4.0      | 2.9  | ----- |
| Cholecystectomy.....                       | 25              | 4.0                 | 1.7  | ----- | 4.0     | 2.8  | ----- | 4.0      | 3.6  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.6  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# PONTIAC OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230207

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.8 years  
Proportion female..... 58.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 22.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 14.4 %  
Admitted for emergency..... 77.4 %

### COMORBIDITIES:

Cancer..... 6.2 %  
Chronic cardiovascular disease..... 38.8 %  
Chronic liver disease..... 0.5 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 28.4 %  
Cerebrovascular degeneration..... 2.2 %  
Diabetes mellitus..... 12.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.6%  
State ..... 10.3%  
Outside State ..... 3.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 204  
Occupancy Rate ..... 58.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 27.8 %  
Case Mix Index (CMI) ..... 1.2686

### STAFFING:

Total Number of Physicians..... 99  
Percent of Physicians Board  
Certified Specialists..... 70.7 %  
Medical Residents/Interns ..... 65  
Registered Nurses..... 183  
Licensed Practical Nurses ..... 60

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# PORT HURON HOSPITAL

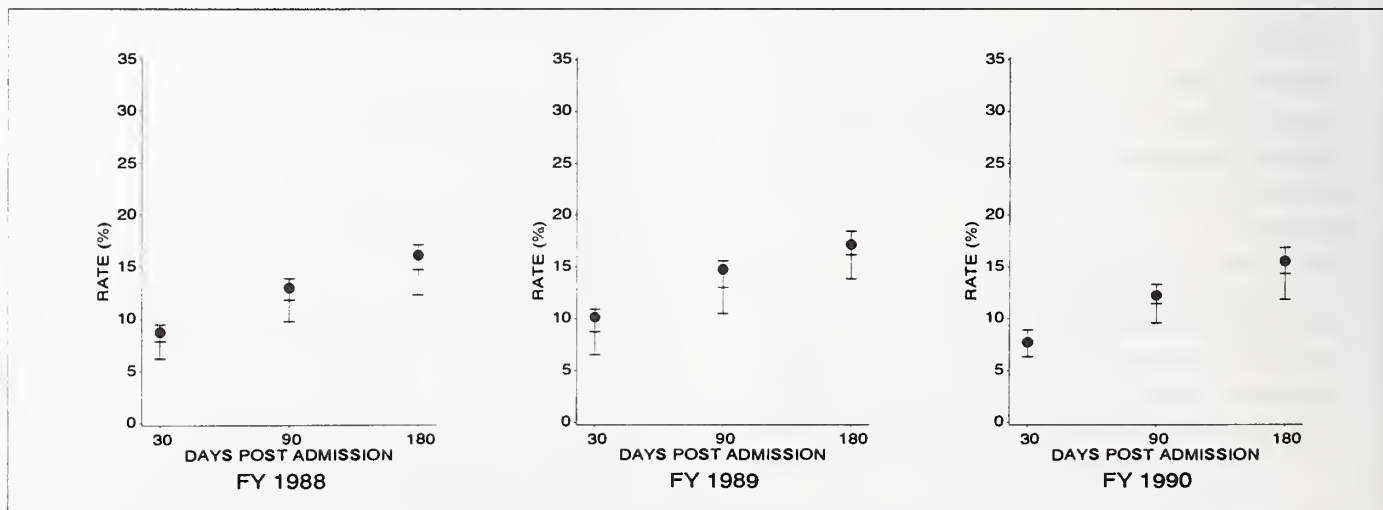
1001 KEARNEY STREET  
PORT HURON, MI 48060  
Medicare Provider Number: 230216

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1812            | 7.7                 | 7.6  | 0.6  | 12.2    | 11.4 | 0.9  | 15.5     | 14.3 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 61              | 29.5                | 25.6 | 6.3  | 29.5    | 28.7 | 6.1  | 32.8     | 31.3 | 6.1  |
| Congestive Heart Failure.....              | 113             | 16.8                | 12.6 | 4.2  | 29.2    | 20.0 | 5.8  | 37.2     | 26.0 | 6.7  |
| Pneumonia/Influenza.....                   | 83              | 10.8                | 14.3 | 5.1  | 15.7    | 19.3 | 5.6  | 21.7     | 23.1 | 4.8  |
| Chronic Obstructive Pulmonary Disease..... | 35              | 0.0                 | 8.9  | ---- | 5.7     | 15.0 | ---- | 11.4     | 19.4 | ---- |
| Transient Cerebral Ischemia.....           | 49              | 4.1                 | 1.9  | ---- | 10.2    | 4.2  | ---- | 12.2     | 6.8  | ---- |
| Stroke.....                                | 71              | 23.9                | 18.9 | 7.1  | 32.4    | 26.2 | 9.8  | 36.6     | 30.3 | 9.1  |
| Hip Fracture.....                          | 47              | 8.5                 | 5.5  | ---- | 14.9    | 9.8  | ---- | 21.3     | 12.6 | ---- |
| Sepsis.....                                | 18              | 22.2                | 26.5 | ---- | 27.8    | 32.1 | ---- | 27.8     | 35.9 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 14              | 0.0                 | 2.4  | ---- | 0.0     | 4.8  | ---- | 0.0      | 7.1  | ---- |
| Carotid Endarterectomy.....                | 34              | 0.0                 | 1.7  | ---- | 0.0     | 3.2  | ---- | 0.0      | 4.8  | ---- |
| Hip Replacement/Reconstruction.....        | 109             | 1.8                 | 1.7  | 1.4  | 1.8     | 3.0  | 2.1  | 4.6      | 4.0  | 2.0  |
| Open Reduction of Hip Fracture.....        | 20              | 15.0                | 4.6  | ---- | 30.0    | 8.5  | ---- | 35.0     | 11.4 | ---- |
| Prostatectomy.....                         | 22              | 0.0                 | 1.2  | ---- | 4.5     | 2.9  | ---- | 4.5      | 4.9  | ---- |
| Cholecystectomy.....                       | 35              | 2.9                 | 2.0  | ---- | 5.7     | 3.8  | ---- | 5.7      | 5.1  | ---- |
| Hysterectomy.....                          | 24              | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# PORT HURON HOSPITAL

Medicare Provider Number: 230216

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.9 years  
Proportion female..... 57.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 47.6 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 26.5 %  
Admitted for emergency..... 50.9 %

### COMORBIDITIES:

Cancer..... 5.1 %  
Chronic cardiovascular disease..... 38.0 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 17.8 %  
Cerebrovascular degeneration..... 2.9 %  
Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 73.2%  
State ..... 25.0%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 264  
Occupancy Rate ..... 59.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 32.8 %  
Case Mix Index (CMI) ..... 1.2857

### STAFFING:

Total Number of Physicians..... 115  
Percent of Physicians Board  
Certified Specialists..... 66.1 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 226  
Licensed Practical Nurses ..... 57

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# PORTAGE VIEW HOSPITAL

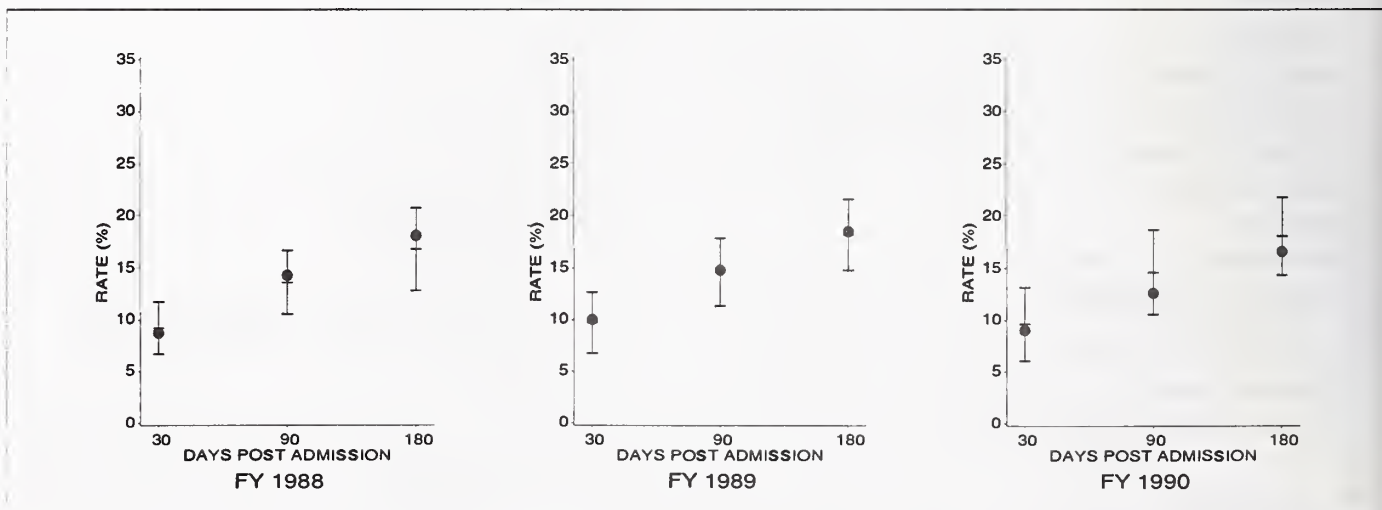
200-210 MICHIGAN STREET  
HANCOCK, MI 49930  
Medicare Provider Number: 230108

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 531                | 9.0                 | 9.6  | 1.8  | 12.6    | 14.6 | 2.0  | 16.6     | 18.1 | 1.9  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 13                 | 23.1                | 24.1 | ---- | 23.1    | 27.1 | ---- | 30.8     | 30.0 | ---- |
| Congestive Heart Failure.....              | 30                 | 10.0                | 13.6 | ---- | 16.7    | 21.2 | ---- | 26.7     | 27.5 | ---- |
| Pneumonia/Influenza.....                   | 29                 | 6.9                 | 14.4 | ---- | 10.3    | 19.4 | ---- | 13.8     | 23.0 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 8                  | 12.5                | 8.7  | ---- | 12.5    | 14.1 | ---- | 12.5     | 18.2 | ---- |
| Transient Cerebral Ischemia.....           | 9                  | 0.0                 | 1.5  | ---- | 0.0     | 3.3  | ---- | 0.0      | 5.3  | ---- |
| Stroke.....                                | 28                 | 17.9                | 19.2 | ---- | 25.0    | 25.7 | ---- | 25.0     | 29.6 | ---- |
| Hip Fracture.....                          | 27                 | 7.4                 | 7.8  | ---- | 7.4     | 13.5 | ---- | 7.4      | 17.1 | ---- |
| Sepsis.....                                | 6                  | 50.0                | 44.9 | ---- | 50.0    | 54.9 | ---- | 50.0     | 59.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 9                  | 0.0                 | 4.1  | ---- | 0.0     | 7.8  | ---- | 0.0      | 10.9 | ---- |
| Open Reduction of Hip Fracture.....        | 17                 | 11.8                | 8.2  | ---- | 11.8    | 14.4 | ---- | 11.8     | 18.4 | ---- |
| Prostatectomy.....                         | 36                 | 0.0                 | 1.0  | ---- | 0.0     | 2.3  | ---- | 2.8      | 3.8  | ---- |
| Cholecystectomy.....                       | 15                 | 6.7                 | 2.1  | ---- | 6.7     | 4.3  | ---- | 6.7      | 6.2  | ---- |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# PORTAGE VIEW HOSPITAL

Medicare Provider Number: 230108

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.6 years  
Proportion female..... 53.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 17.1 %  
Admitted for emergency..... 74.2 %

### COMORBIDITIES:

Cancer..... 7.0 %  
Chronic cardiovascular disease..... 42.4 %  
Chronic liver disease..... 1.7 %  
Chronic renal disease..... 2.4 %  
Chronic pulmonary disease..... 18.6 %  
Cerebrovascular degeneration..... 8.9 %  
Diabetes mellitus..... 10.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 91.5%  
State ..... 6.7%  
Outside State ..... 1.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.4 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 74  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 41.8 %  
Case Mix Index (CMI) ..... 1.1091

### STAFFING:

Total Number of Physicians..... 23  
Percent of Physicians Board  
Certified Specialists..... 52.2 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 42  
Licensed Practical Nurses ..... 2

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation ..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# PROVIDENCE HOSPITAL

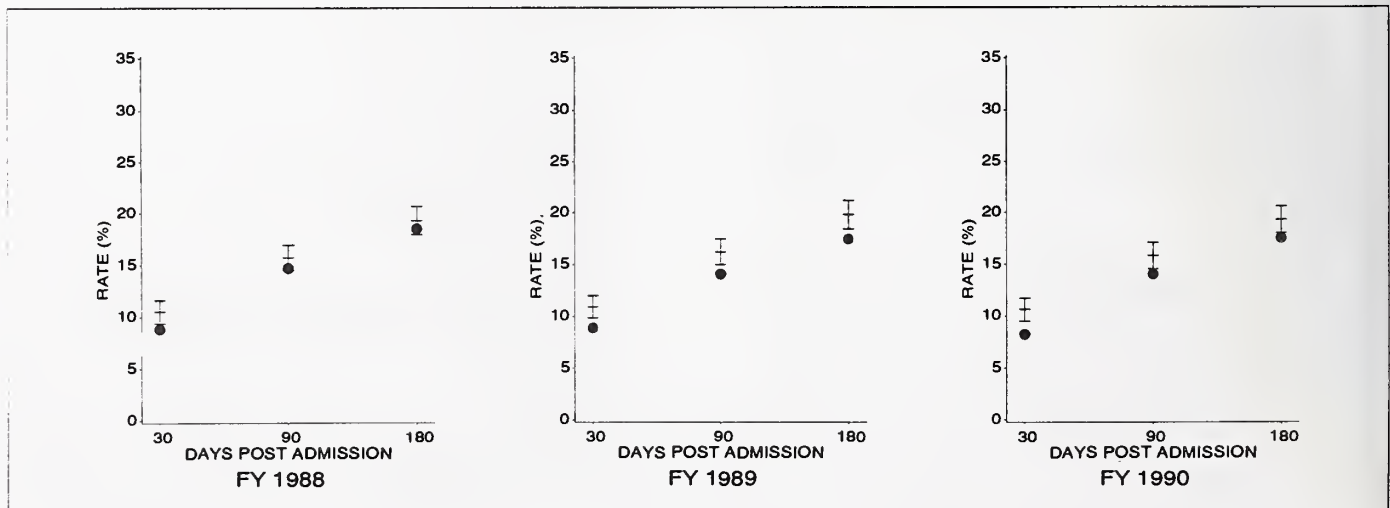
16001 W NINE MILE RD  
SOUTHFIELD, MI 48037  
Medicare Provider Number: 230019

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3911            | 8.2                 | 10.6 | 0.6   | 14.0    | 15.8 | 0.6   | 17.5     | 19.3 | 0.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 125             | 20.0                | 29.1 | 6.2   | 23.2    | 32.1 | 6.2   | 25.6     | 34.9 | 6.3   |
| Congestive Heart Failure.....              | 228             | 14.0                | 15.5 | 2.7   | 23.2    | 24.2 | 3.2   | 29.8     | 30.6 | 3.1   |
| Pneumonia/Influenza.....                   | 130             | 20.0                | 17.5 | 6.2   | 26.9    | 23.7 | 4.9   | 30.0     | 27.5 | 4.7   |
| Chronic Obstructive Pulmonary Disease..... | 36              | 2.8                 | 11.6 | ----- | 11.1    | 19.6 | ----- | 11.1     | 24.9 | ----- |
| Transient Cerebral Ischemia.....           | 62              | 1.6                 | 1.7  | 1.7   | 1.6     | 3.7  | 2.8   | 3.2      | 5.9  | 3.8   |
| Stroke.....                                | 182             | 12.1                | 20.7 | 3.9   | 20.9    | 28.0 | 4.0   | 25.3     | 32.0 | 4.1   |
| Hip Fracture.....                          | 115             | 4.3                 | 7.6  | 4.5   | 11.3    | 12.6 | 4.4   | 14.8     | 16.0 | 3.9   |
| Sepsis.....                                | 61              | 16.4                | 32.3 | 8.4   | 39.3    | 41.9 | 9.2   | 39.3     | 47.2 | 7.2   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 36              | 0.0                 | 2.2  | ----- | 0.0     | 3.1  | ----- | 0.0      | 4.0  | ----- |
| Coronary Artery Bypass Graft.....          | 128             | 5.5                 | 6.3  | 3.1   | 7.0     | 8.3  | 2.7   | 8.6      | 9.1  | 2.6   |
| Initial Pacemaker Insertion.....           | 23              | 0.0                 | 5.4  | ----- | 0.0     | 10.1 | ----- | 8.7      | 13.8 | ----- |
| Carotid Endarterectomy.....                | 17              | 0.0                 | 2.1  | ----- | 0.0     | 4.0  | ----- | 0.0      | 6.0  | ----- |
| Hip Replacement/Reconstruction.....        | 86              | 2.3                 | 3.4  | 2.1   | 7.0     | 6.0  | 3.6   | 7.0      | 7.8  | 3.9   |
| Open Reduction of Hip Fracture.....        | 51              | 5.9                 | 7.5  | 4.2   | 13.7    | 13.0 | 4.7   | 19.6     | 16.8 | 6.5   |
| Prostatectomy.....                         | 175             | 1.1                 | 0.9  | 0.7   | 2.9     | 2.0  | 1.3   | 6.3      | 3.4  | 2.6   |
| Cholecystectomy.....                       | 77              | 0.0                 | 2.4  | 2.2   | 0.0     | 4.3  | 3.3   | 0.0      | 5.6  | 4.0   |
| Hysterectomy.....                          | 59              | 0.0                 | 0.5  | 1.0   | 0.0     | 1.0  | 1.6   | 0.0      | 1.6  | 2.2   |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# PROVIDENCE HOSPITAL

Medicare Provider Number: 230019

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.6 years

Proportion female..... 58.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 3.7 %

Transferred from skilled nursing facility..... 0.7 %

Admitted for elective procedure..... 20.5 %

Admitted for emergency..... 56.7 %

### COMORBIDITIES:

Cancer..... 8.4 %

Chronic cardiovascular disease..... 45.7 %

Chronic liver disease..... 0.8 %

Chronic renal disease..... 3.8 %

Chronic pulmonary disease..... 12.0 %

Cerebrovascular degeneration..... 3.5 %

Diabetes mellitus..... 9.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 47.4%

State ..... 50.4%

Outside State ..... 2.2%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 462

Occupancy Rate ..... 76.0 %

Ownership/Control..... Church

Medicare Discharges ..... 32.5 %

Case Mix Index (CMI) ..... 1.5333

### STAFFING:

Total Number of Physicians..... 374

Percent of Physicians Board  
Certified Specialists ..... 83.2 %

Medical Residents/Interns ..... 119

Registered Nurses..... 515

Licensed Practical Nurses ..... 16

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... Yes

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... Yes

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# REED CITY HOSPITAL

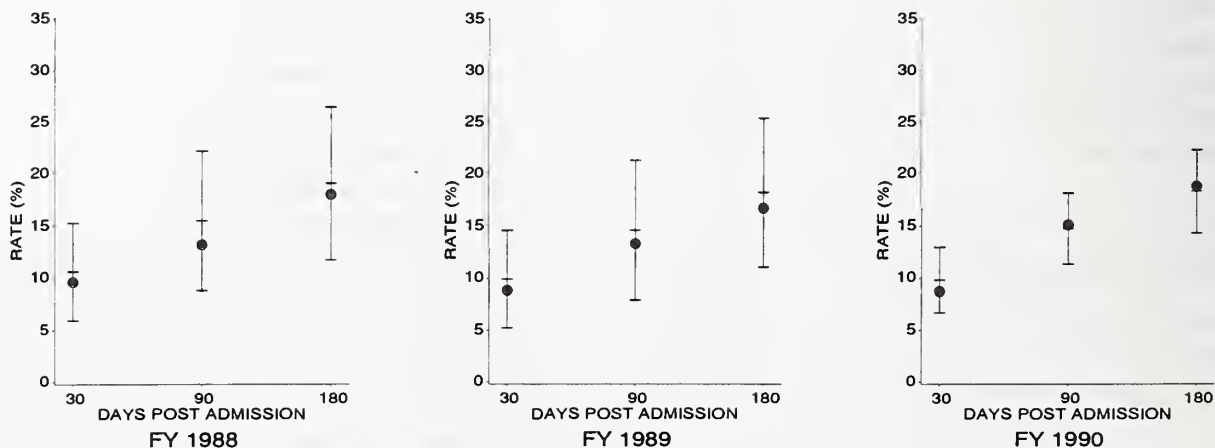
7665 PATTERSON RD  
REED CITY, MI 49677  
Medicare Provider Number: 230086

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 437             | 8.7                 | 9.8  | 1.6   | 15.1    | 14.7 | 1.7   | 18.8     | 18.3 | 2.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 13              | 30.8                | 25.6 | ----- | 30.8    | 28.7 | ----- | 46.2     | 31.6 | ----- |
| Congestive Heart Failure.....              | 53              | 13.2                | 13.3 | 4.7   | 22.6    | 21.0 | 6.8   | 32.1     | 26.7 | 8.9   |
| Pneumonia/Influenza.....                   | 36              | 13.9                | 18.7 | ----- | 27.8    | 25.3 | ----- | 30.6     | 29.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11              | 0.0                 | 8.8  | ----- | 0.0     | 14.0 | ----- | 0.0      | 18.3 | ----- |
| Transient Cerebral Ischemia.....           | 15              | 0.0                 | 1.7  | ----- | 0.0     | 3.9  | ----- | 6.7      | 6.3  | ----- |
| Stroke.....                                | 9               | 11.1                | 15.7 | ----- | 44.4    | 21.8 | ----- | 44.4     | 25.3 | ----- |
| Hip Fracture.....                          | 11              | 0.0                 | 10.8 | ----- | 18.2    | 19.1 | ----- | 18.2     | 23.9 | ----- |
| Sepsis.....                                | 4               | 50.0                | 32.8 | ----- | 50.0    | 38.2 | ----- | 50.0     | 43.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 6               | 0.0                 | 4.0  | ----- | 16.7    | 7.2  | ----- | 16.7     | 9.2  | ----- |
| Open Reduction of Hip Fracture.....        | 8               | 0.0                 | 10.4 | ----- | 12.5    | 19.2 | ----- | 12.5     | 24.6 | ----- |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 4               | 0.0                 | 1.4  | ----- | 0.0     | 2.4  | ----- | 0.0      | 3.1  | ----- |
| Hysterectomy.....                          | 4               | 0.0                 | 2.4  | ----- | 0.0     | 4.5  | ----- | 0.0      | 6.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# REED CITY HOSPITAL

Medicare Provider Number: 230086

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.2 years  
Proportion female..... 54.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 28.8 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 70.5 %

### COMORBIDITIES:

Cancer..... 6.4 %  
Chronic cardiovascular disease..... 56.5 %  
Chronic liver disease..... 0.2 %  
Chronic renal disease..... 1.8 %  
Chronic pulmonary disease..... 20.6 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 9.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 58.6%  
State..... 39.8%  
Outside State..... 1.6%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 4.8 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 110  
Occupancy Rate..... 61.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 44.1 %  
Case Mix Index (CMI)..... 1.0015

### STAFFING:

Total Number of Physicians..... 14  
Percent of Physicians Board  
Certified Specialists..... 64.3 %  
Medical Residents/Interns..... (Not Available)  
Registered Nurses..... (Not Available)  
Licensed Practical Nurses..... (Not Available)

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... No  
Hospice Care..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# RIVER DISTRICT HOSPITAL

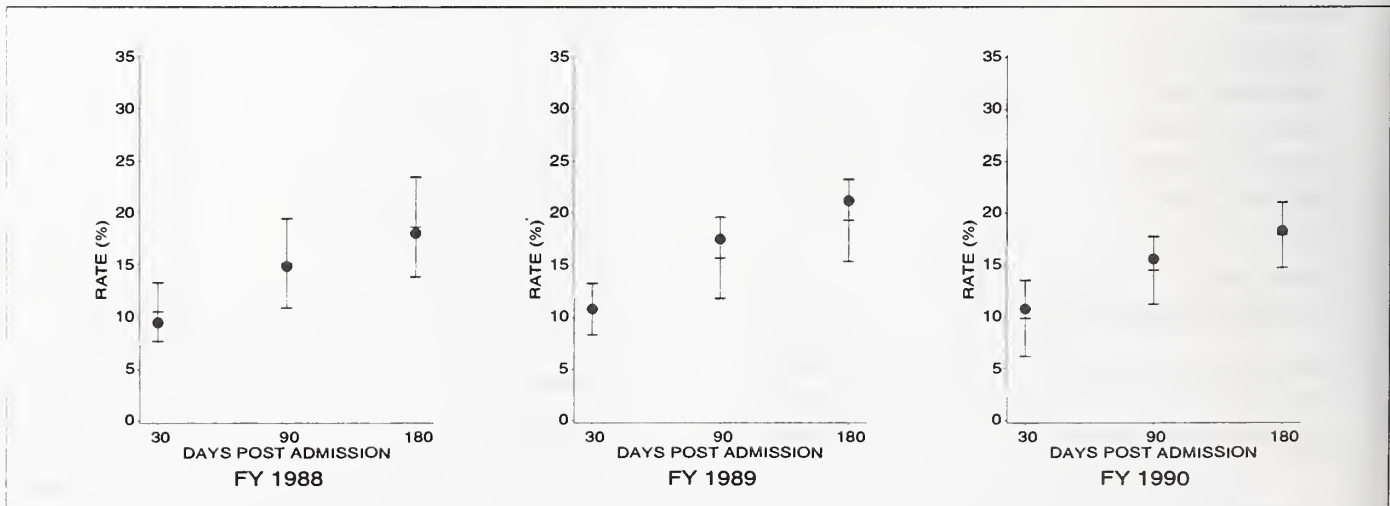
4100 SOUTH RIVER ROAD  
ST CLAIR, MI 48079  
Medicare Provider Number: 230241

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 623             | 10.8                | 9.9  | 1.8   | 15.6    | 14.5 | 1.6   | 18.3     | 17.9 | 1.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 25              | 24.0                | 24.8 | ----- | 28.0    | 27.7 | ----- | 32.0     | 30.2 | ----- |
| Congestive Heart Failure.....              | 58              | 17.2                | 15.3 | 5.8   | 34.5    | 24.5 | 10.3  | 39.7     | 31.1 | 11.4  |
| Pneumonia/Influenza.....                   | 41              | 17.1                | 16.1 | ----- | 24.4    | 21.9 | ----- | 26.8     | 26.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 20              | 15.0                | 11.6 | ----- | 20.0    | 19.2 | ----- | 20.0     | 25.1 | ----- |
| Transient Cerebral Ischemia.....           | 11              | 9.1                 | 1.8  | ----- | 9.1     | 4.0  | ----- | 9.1      | 6.7  | ----- |
| Stroke.....                                | 22              | 27.3                | 21.9 | ----- | 31.8    | 28.1 | ----- | 36.4     | 31.9 | ----- |
| Hip Fracture.....                          | 13              | 0.0                 | 5.3  | ----- | 0.0     | 9.0  | ----- | 0.0      | 11.5 | ----- |
| Sepsis.....                                | 4               | 0.0                 | 29.3 | ----- | 0.0     | 38.4 | ----- | 0.0      | 42.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 6               | 0.0                 | 3.6  | ----- | 0.0     | 7.0  | ----- | 0.0      | 9.8  | ----- |
| Carotid Endarterectomy.....                | 3               | 0.0                 | 0.7  | ----- | 0.0     | 1.3  | ----- | 0.0      | 1.9  | ----- |
| Hip Replacement/Reconstruction.....        | 5               | 0.0                 | 3.0  | ----- | 0.0     | 5.5  | ----- | 0.0      | 7.4  | ----- |
| Open Reduction of Hip Fracture.....        | 9               | 0.0                 | 4.9  | ----- | 0.0     | 8.5  | ----- | 0.0      | 11.0 | ----- |
| Prostatectomy.....                         | 24              | 0.0                 | 0.4  | ----- | 0.0     | 1.0  | ----- | 4.2      | 1.8  | ----- |
| Cholecystectomy.....                       | 10              | 0.0                 | 1.3  | ----- | 0.0     | 2.3  | ----- | 0.0      | 2.9  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# RIVER DISTRICT HOSPITAL

Medicare Provider Number: 230241

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.8 years  
Proportion female..... 58.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 29.2 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 10.6 %  
Admitted for emergency..... 70.3 %

### COMORBIDITIES:

Cancer..... 4.3 %  
Chronic cardiovascular disease..... 36.6 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 1.8 %  
Chronic pulmonary disease..... 20.5 %  
Cerebrovascular degeneration..... 2.6 %  
Diabetes mellitus..... 4.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 90.1 %  
State ..... 8.0 %  
Outside State ..... 1.9 %  
Total ..... 100.0 %

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 68  
Occupancy Rate ..... 45.0 %  
Ownership/Control..... District/Authority  
Medicare Discharges ..... 44.7 %  
Case Mix Index (CMI) ..... 1.1267

### STAFFING:

Total Number of Physicians..... 55  
Percent of Physicians Board  
Certified Specialists..... 72.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 58  
Licensed Practical Nurses ..... 42

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# RIVERSIDE OSTEOPATHIC HOSPITAL

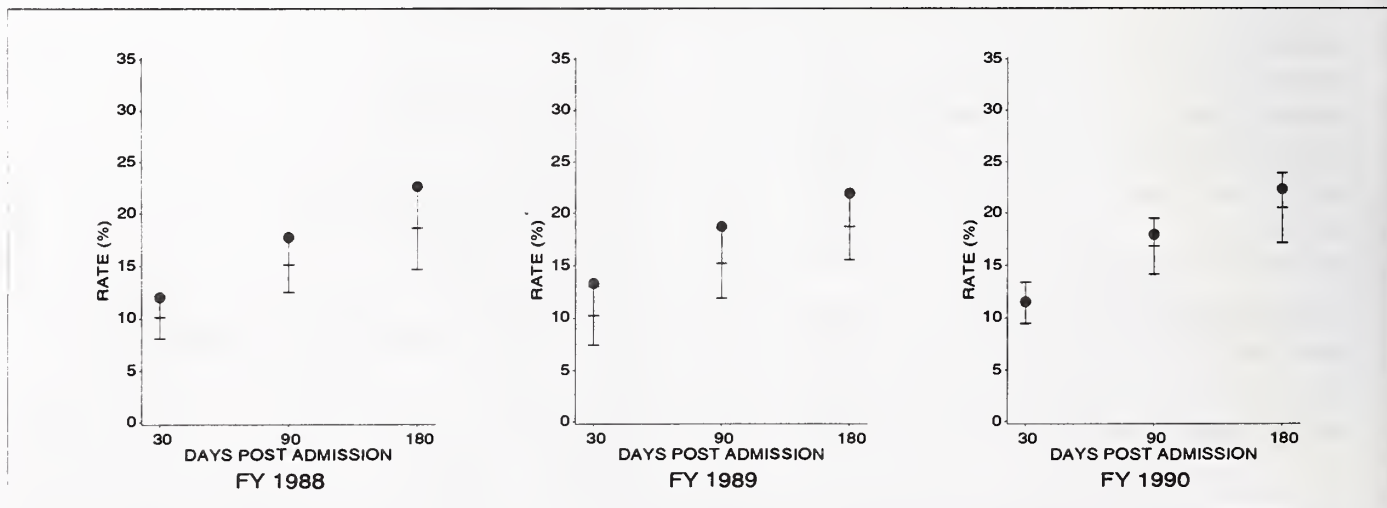
150 TRUAX STREET  
TRENTON, MI 48183  
Medicare Provider Number: 230169

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1074            | 11.5                | 11.4 | 1.0  | 17.9    | 16.8 | 1.3  | 22.3     | 20.5 | 1.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 39              | 20.5                | 27.5 | ---- | 23.1    | 30.9 | ---- | 28.2     | 33.7 | ---- |
| Congestive Heart Failure.....              | 62              | 16.1                | 17.8 | 5.4  | 27.4    | 25.9 | 5.8  | 38.7     | 32.1 | 7.3  |
| Pneumonia/Influenza.....                   | 44              | 15.9                | 14.7 | ---- | 22.7    | 20.0 | ---- | 27.3     | 23.6 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 18              | 0.0                 | 10.1 | ---- | 11.1    | 17.5 | ---- | 22.2     | 22.8 | ---- |
| Transient Cerebral Ischemia.....           | 18              | 5.6                 | 1.9  | ---- | 5.6     | 4.3  | ---- | 5.6      | 7.0  | ---- |
| Stroke.....                                | 35              | 28.6                | 17.1 | ---- | 34.3    | 24.1 | ---- | 34.3     | 27.6 | ---- |
| Hip Fracture.....                          | 25              | 4.0                 | 5.5  | ---- | 4.0     | 10.0 | ---- | 4.0      | 12.9 | ---- |
| Sepsis.....                                | 20              | 40.0                | 32.4 | ---- | 50.0    | 42.9 | ---- | 60.0     | 48.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 6               | 0.0                 | 1.7  | ---- | 0.0     | 3.5  | ---- | 16.7     | 5.3  | ---- |
| Carotid Endarterectomy.....                | 6               | 0.0                 | 2.2  | ---- | 0.0     | 4.4  | ---- | 0.0      | 6.3  | ---- |
| Hip Replacement/Reconstruction.....        | 15              | 0.0                 | 4.3  | ---- | 6.7     | 8.3  | ---- | 6.7      | 11.3 | ---- |
| Open Reduction of Hip Fracture.....        | 15              | 0.0                 | 3.8  | ---- | 0.0     | 7.3  | ---- | 0.0      | 9.8  | ---- |
| Prostatectomy.....                         | 25              | 0.0                 | 1.2  | ---- | 4.0     | 2.6  | ---- | 8.0      | 4.2  | ---- |
| Cholecystectomy.....                       | 28              | 0.0                 | 2.9  | ---- | 7.1     | 5.7  | ---- | 10.7     | 7.9  | ---- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# RIVERSIDE OSTEOPATHIC HOSPITAL

Medicare Provider Number: 230169

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.1 years

Proportion female..... 54.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 33.7 %

Transferred from skilled nursing facility..... 0.1 %

Admitted for elective procedure..... 14.6 %

Admitted for emergency..... 80.4 %

### COMORBIDITIES:

Cancer..... 9.3 %

Chronic cardiovascular disease..... 30.5 %

Chronic liver disease..... 1.1 %

Chronic renal disease..... 2.0 %

Chronic pulmonary disease..... 13.5 %

Cerebrovascular degeneration..... 4.1 %

Diabetes mellitus..... 15.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.7%

State ..... 4.6%

Outside State ..... 1.7%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.9 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 185

Occupancy Rate ..... 47.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 35.3 %

Case Mix Index (CMI) ..... 1.2802

### STAFFING:

Total Number of Physicians..... 170

Percent of Physicians Board  
Certified Specialists..... 51.8 %

Medical Residents/Interns ..... 25

Registered Nurses..... 89

Licensed Practical Nurses ..... 13

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ROGERS CITY HOSPITAL

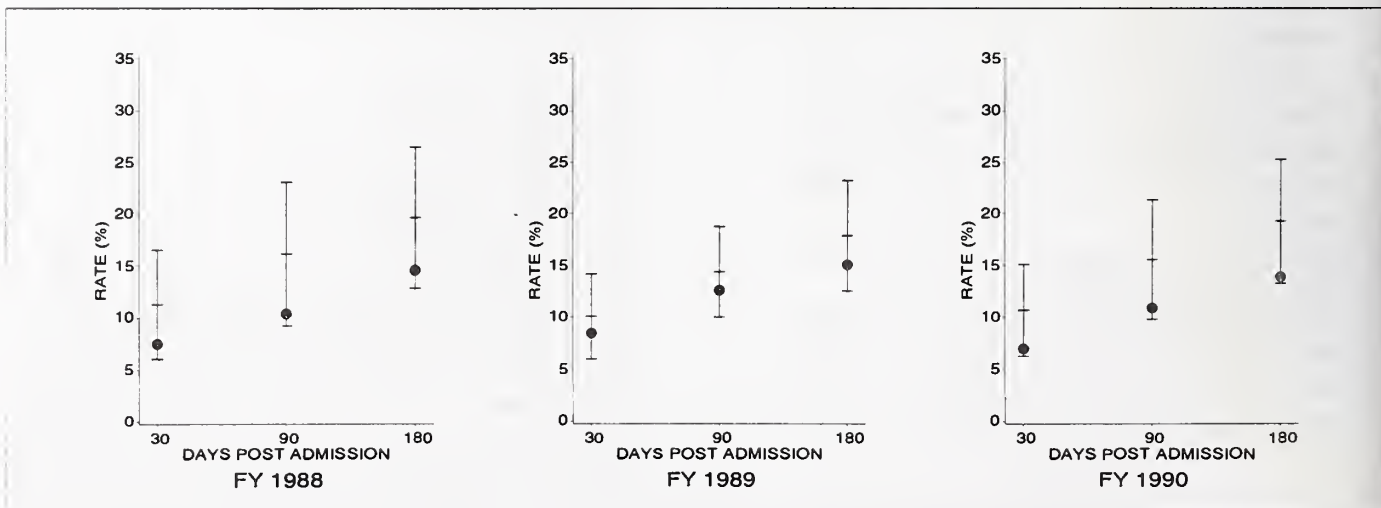
555 N BRADLEY HWY  
ROGERS CITY, MI 49779  
Medicare Provider Number: 230014

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 330             | 7.0                 | 10.7 | 2.2  | 10.9    | 15.6 | 2.9  | 13.9     | 19.3 | 3.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 14              | 28.6                | 28.3 | ---- | 28.6    | 31.3 | ---- | 28.6     | 34.4 | ---- |
| Congestive Heart Failure.....              | 25              | 20.0                | 14.0 | ---- | 24.0    | 22.2 | ---- | 24.0     | 28.4 | ---- |
| Pneumonia/Influenza.....                   | 16              | 0.0                 | 13.4 | ---- | 6.3     | 18.1 | ---- | 18.8     | 21.5 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 4               | 0.0                 | 12.2 | ---- | 0.0     | 19.1 | ---- | 0.0      | 23.2 | ---- |
| Transient Cerebral Ischemia.....           | 2               | 0.0                 | 0.9  | ---- | 0.0     | 2.3  | ---- | 0.0      | 4.2  | ---- |
| Stroke.....                                | 5               | 0.0                 | 34.0 | ---- | 20.0    | 40.3 | ---- | 20.0     | 44.1 | ---- |
| Hip Fracture.....                          | 1               | 0.0                 | 3.5  | ---- | 0.0     | 6.2  | ---- | 0.0      | 8.0  | ---- |
| Sepsis.....                                | 2               | 50.0                | 32.8 | ---- | 50.0    | 51.4 | ---- | 50.0     | 59.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 3               | 0.0                 | 4.6  | ---- | 0.0     | 7.5  | ---- | 0.0      | 8.7  | ---- |
| Hysterectomy.....                          | 1               | 0.0                 | 0.1  | ---- | 0.0     | 0.3  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ROGERS CITY HOSPITAL

Medicare Provider Number: 230014

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.3 years

Proportion female..... 56.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 20.3 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.0 %

Admitted for emergency..... 78.5 %

### COMORBIDITIES:

Cancer..... 4.8 %

Chronic cardiovascular disease..... 44.5 %

Chronic liver disease..... 0.3 %

Chronic renal disease..... 3.9 %

Chronic pulmonary disease..... 11.2 %

Cerebrovascular degeneration..... 2.1 %

Diabetes mellitus..... 11.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 85.2%

State ..... 13.2%

Outside State ..... 1.6%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.9 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 89

Occupancy Rate ..... 66.0 %

Ownership/Control..... Local Government

Medicare Discharges ..... 53.1 %

Case Mix Index (CMI) ..... 0.9884

### STAFFING:

Total Number of Physicians..... 5

Percent of Physicians Board  
Certified Specialists .....(Not Available)

Medical Residents/Interns ..... 0

Registered Nurses..... 23

Licensed Practical Nurses ..... 13

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# SAGINAW GENERAL HOSPITAL

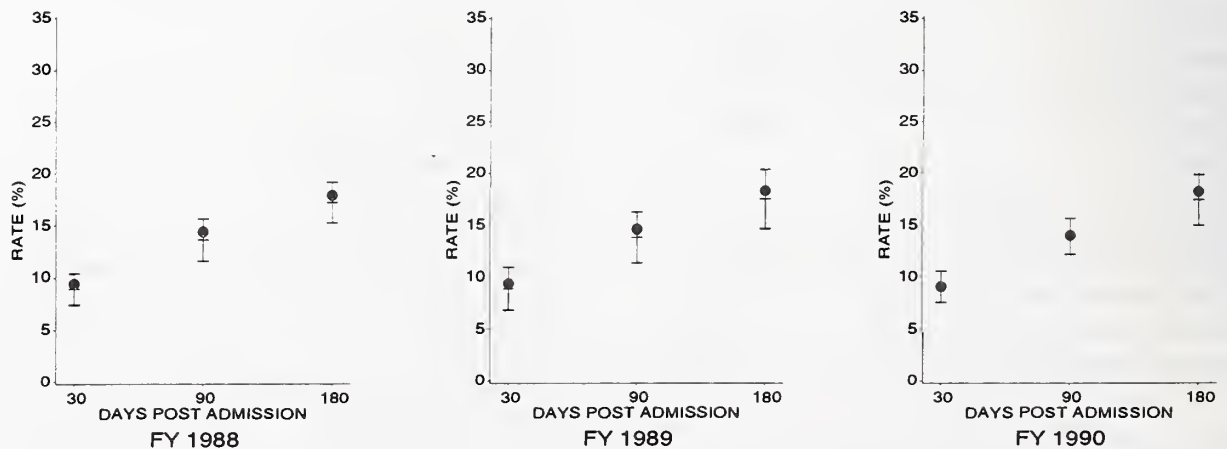
1447 N HARRISON STREET  
SAGINAW, MI 48602  
Medicare Provider Number: 230122

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1691            | 9.1                 | 9.1  | 0.7   | 14.0    | 13.9 | 0.9   | 18.2     | 17.4 | 1.2   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 48              | 35.4                | 26.8 | ----- | 39.6    | 29.3 | ----- | 43.8     | 31.7 | ----- |
| Congestive Heart Failure.....              | 110             | 18.2                | 14.1 | 5.6   | 25.5    | 21.9 | 5.4   | 30.9     | 27.8 | 5.0   |
| Pneumonia/Influenza.....                   | 68              | 14.7                | 17.5 | 5.2   | 22.1    | 23.8 | 5.5   | 30.9     | 27.8 | 6.1   |
| Chronic Obstructive Pulmonary Disease..... | 22              | 0.0                 | 5.6  | ----- | 0.0     | 9.7  | ----- | 4.5      | 13.4 | ----- |
| Transient Cerebral Ischemia.....           | 40              | 0.0                 | 2.2  | ----- | 2.5     | 4.5  | ----- | 5.0      | 7.0  | ----- |
| Stroke.....                                | 59              | 18.6                | 16.2 | 8.1   | 27.1    | 23.3 | 8.4   | 30.5     | 27.2 | 9.7   |
| Hip Fracture.....                          | 30              | 0.0                 | 6.5  | ----- | 0.0     | 11.5 | ----- | 3.3      | 14.7 | ----- |
| Sepsis.....                                | 16              | 37.5                | 25.8 | ----- | 43.8    | 34.1 | ----- | 56.3     | 38.6 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 13              | 0.0                 | 2.9  | ----- | 0.0     | 5.4  | ----- | 0.0      | 7.6  | ----- |
| Carotid Endarterectomy.....                | 4               | 0.0                 | 1.2  | ----- | 50.0    | 2.3  | ----- | 50.0     | 3.7  | ----- |
| Hip Replacement/Reconstruction.....        | 42              | 0.0                 | 2.3  | ----- | 0.0     | 4.2  | ----- | 2.4      | 5.5  | ----- |
| Open Reduction of Hip Fracture.....        | 15              | 0.0                 | 6.8  | ----- | 0.0     | 12.1 | ----- | 0.0      | 15.8 | ----- |
| Prostatectomy.....                         | 50              | 0.0                 | 1.4  | ----- | 4.0     | 3.3  | ----- | 4.0      | 5.5  | ----- |
| Cholecystectomy.....                       | 56              | 3.6                 | 3.5  | 2.6   | 3.6     | 7.0  | 4.0   | 5.4      | 9.7  | 5.2   |
| Hysterectomy.....                          | 50              | 2.0                 | 0.4  | ----- | 2.0     | 1.1  | ----- | 2.0      | 1.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SAGINAW GENERAL HOSPITAL

Medicare Provider Number: 230122

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 72.3 years  
Proportion female..... 56.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 44.2 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 21.8 %  
Admitted for emergency..... 55.3 %

### COMORBIDITIES:

Cancer..... 8.5 %  
Chronic cardiovascular disease..... 43.2 %  
Chronic liver disease..... 1.7 %  
Chronic renal disease..... 6.9 %  
Chronic pulmonary disease..... 11.6 %  
Cerebrovascular degeneration..... 4.0 %  
Diabetes mellitus..... 13.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 75.4%  
State ..... 23.2%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 277  
Occupancy Rate ..... 69.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 23.0 %  
Case Mix Index (CMI) ..... 1.3368

### STAFFING:

Total Number of Physicians..... 132  
Percent of Physicians Board  
Certified Specialists ..... 70.5 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 352  
Licensed Practical Nurses ..... 137

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SALINE COMMUNITY HOSPITAL

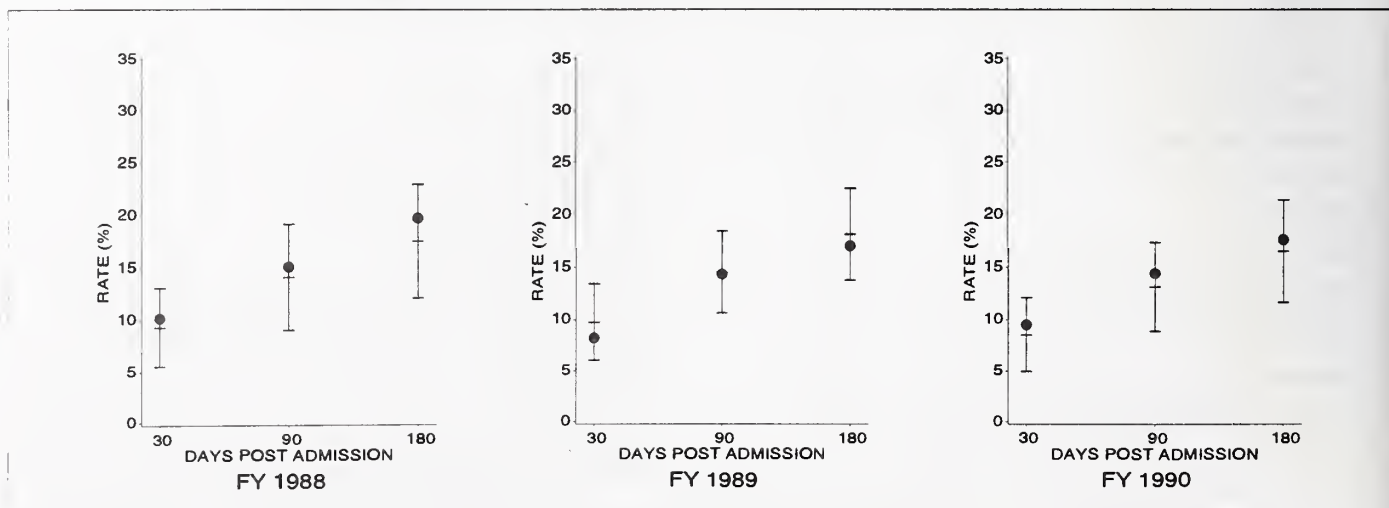
400 RUSSELL ST  
SALINE, MI 48176  
Medicare Provider Number: 230212

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 557             | 9.5                 | 8.5  | 1.8   | 14.4    | 13.1 | 2.1   | 17.6     | 16.5 | 2.4   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 13              | 23.1                | 24.6 | ----- | 23.1    | 27.1 | ----- | 30.8     | 29.5 | ----- |
| Congestive Heart Failure.....              | 33              | 15.2                | 14.6 | ----- | 30.3    | 23.2 | ----- | 33.3     | 29.7 | ----- |
| Pneumonia/Influenza.....                   | 35              | 20.0                | 14.1 | ----- | 22.9    | 19.5 | ----- | 28.6     | 23.7 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 11.1                | 9.9  | ----- | 33.3    | 16.9 | ----- | 33.3     | 21.4 | ----- |
| Transient Cerebral Ischemia.....           | 3               | 33.3                | 1.1  | ----- | 33.3    | 2.6  | ----- | 33.3     | 4.4  | ----- |
| Stroke.....                                | 15              | 53.3                | 16.3 | ----- | 53.3    | 24.6 | ----- | 53.3     | 29.6 | ----- |
| Hip Fracture.....                          | 9               | 0.0                 | 6.6  | ----- | 0.0     | 12.1 | ----- | 11.1     | 15.8 | ----- |
| Sepsis.....                                | 5               | 40.0                | 31.1 | ----- | 40.0    | 38.8 | ----- | 40.0     | 43.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 4               | 0.0                 | 4.2  | ----- | 0.0     | 8.6  | ----- | 25.0     | 12.0 | ----- |
| Open Reduction of Hip Fracture.....        | 7               | 0.0                 | 6.6  | ----- | 0.0     | 12.2 | ----- | 14.3     | 16.1 | ----- |
| Prostatectomy.....                         | 26              | 0.0                 | 0.6  | ----- | 0.0     | 1.4  | ----- | 3.8      | 2.5  | ----- |
| Cholecystectomy.....                       | 10              | 0.0                 | 1.2  | ----- | 0.0     | 2.2  | ----- | 0.0      | 2.9  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.1  | ----- | 0.0     | 0.3  | ----- | 0.0      | 0.5  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# **SALINE COMMUNITY HOSPITAL**

Medicare Provider Number: 230212

## **FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

### **DEMOGRAPHICS:**

Average age at admission..... 75.8 years

Proportion female..... 60.0 %

### **ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 44.2 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 11.5 %

Admitted for emergency..... 54.2 %

### **COMORBIDITIES:**

Cancer..... 5.9 %

Chronic cardiovascular disease..... 25.0 %

Chronic liver disease..... 0.7 %

Chronic renal disease..... 1.1 %

Chronic pulmonary disease..... 11.1 %

Cerebrovascular degeneration..... 1.8 %

Diabetes mellitus..... 7.5 %

## **ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

### **ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 67.2%

State ..... 30.8%

Outside State ..... 2.0%

Total ..... 100.0%

### **MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 5.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## **HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### **PROFILE:**

Total Beds ..... 61

Occupancy Rate ..... 50.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 41.5 %

Case Mix Index (CMI) ..... 1.0591

### **STAFFING:**

Total Number of Physicians..... 54

Percent of Physicians Board  
Certified Specialists ..... 83.3 %

Medical Residents/Interns ..... 0

Registered Nurses..... 58

Licensed Practical Nurses ..... 7

### **SPECIALTY SERVICES:**

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### **OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... Yes

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SARATOGA GENERAL HOSPITAL

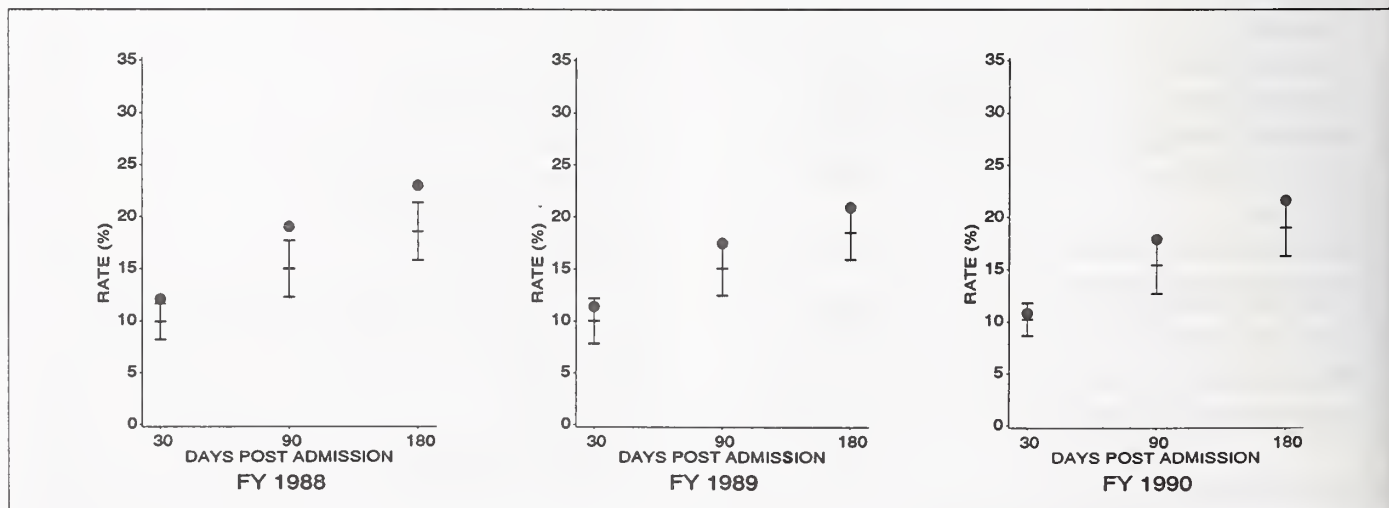
15000 GRATIOT AVENUE  
DETROIT, MI 48205  
Medicare Provider Number: 230063

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1529            | 10.8                | 10.2 | 0.8  | 17.9    | 15.4 | 1.4  | 21.6     | 19.0 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 45              | 33.3                | 28.8 | ---- | 37.8    | 31.7 | ---- | 42.2     | 34.2 | ---- |
| Congestive Heart Failure.....              | 135             | 13.3                | 15.5 | 5.2  | 25.2    | 24.7 | 5.3  | 29.6     | 31.0 | 4.2  |
| Pneumonia/Influenza.....                   | 50              | 16.0                | 17.1 | ---- | 26.0    | 23.1 | ---- | 32.0     | 26.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 23              | 0.0                 | 13.7 | ---- | 8.7     | 21.2 | ---- | 13.0     | 26.3 | ---- |
| Transient Cerebral Ischemia.....           | 50              | 2.0                 | 1.7  | ---- | 4.0     | 3.8  | ---- | 4.0      | 6.2  | ---- |
| Stroke.....                                | 87              | 21.8                | 21.1 | 4.4  | 34.5    | 27.8 | 7.3  | 40.2     | 31.4 | 8.8  |
| Hip Fracture.....                          | 33              | 0.0                 | 7.6  | ---- | 6.1     | 12.9 | ---- | 6.1      | 16.3 | ---- |
| Sepsis.....                                | 9               | 33.3                | 20.4 | ---- | 33.3    | 27.9 | ---- | 44.4     | 31.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 15              | 13.3                | 2.5  | ---- | 26.7    | 5.1  | ---- | 26.7     | 7.3  | ---- |
| Carotid Endarterectomy.....                | 10              | 0.0                 | 1.3  | ---- | 0.0     | 2.5  | ---- | 0.0      | 3.6  | ---- |
| Hip Replacement/Reconstruction.....        | 20              | 5.0                 | 2.9  | ---- | 5.0     | 5.3  | ---- | 5.0      | 7.2  | ---- |
| Open Reduction of Hip Fracture.....        | 19              | 0.0                 | 6.6  | ---- | 10.5    | 11.6 | ---- | 10.5     | 14.8 | ---- |
| Prostatectomy.....                         | 59              | 0.0                 | 0.7  | 1.3  | 0.0     | 1.7  | 2.2  | 0.0      | 2.9  | 3.3  |
| Cholecystectomy.....                       | 33              | 6.1                 | 2.9  | ---- | 9.1     | 6.1  | ---- | 12.1     | 8.8  | ---- |
| Hysterectomy.....                          | 7               | 14.3                | 1.2  | ---- | 14.3    | 2.7  | ---- | 14.3     | 4.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SARATOGA GENERAL HOSPITAL

Medicare Provider Number: 230063

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.6 years  
Proportion female..... 55.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 29.9 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 12.5 %  
Admitted for emergency..... 68.7 %

### COMORBIDITIES:

Cancer..... 6.7 %  
Chronic cardiovascular disease..... 44.1 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 4.1 %  
Chronic pulmonary disease..... 14.1 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 9.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 57.9%  
State ..... 40.9%  
Outside State ..... 1.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 198  
Occupancy Rate ..... 66.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 50.4 %  
Case Mix Index (CMI) ..... 1.2214

### STAFFING:

Total Number of Physicians..... 125  
Percent of Physicians Board  
Certified Specialists ..... 54.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 130  
Licensed Practical Nurses ..... 30

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SCHEURER HOSPITAL

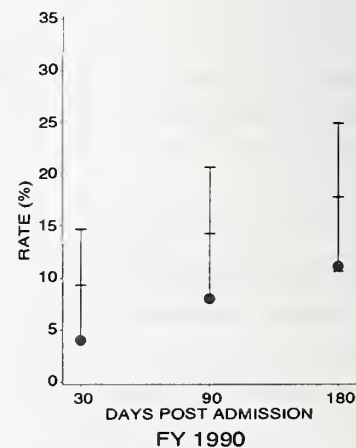
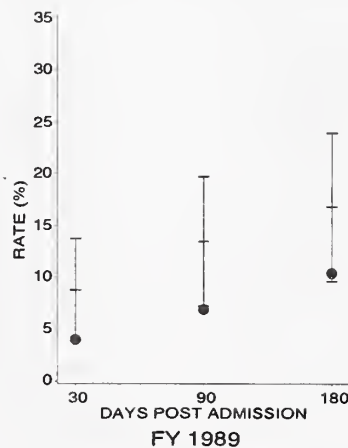
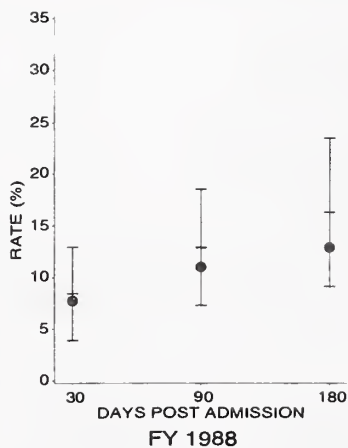
170 NORTH CASEVILLE RD  
PIGEON, MI 48755  
Medicare Provider Number: 230201

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 199             | 4.0                 | 9.3  | 2.7  | 8.0     | 14.3 | 3.2  | 11.1     | 17.8 | 3.6  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 9               | 22.2                | 20.1 | ---- | 22.2    | 24.7 | ---- | 22.2     | 27.6 | ---- |
| Congestive Heart Failure.....              | 16              | 12.5                | 14.8 | ---- | 25.0    | 23.9 | ---- | 25.0     | 30.0 | ---- |
| Pneumonia/Influenza.....                   | 26              | 0.0                 | 16.1 | ---- | 3.8     | 22.3 | ---- | 11.5     | 26.3 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 0               |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.4  | ---- | 0.0     | 3.1  | ---- | 0.0      | 5.4  | ---- |
| Stroke.....                                | 4               | 0.0                 | 15.0 | ---- | 0.0     | 22.5 | ---- | 0.0      | 26.1 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1               | 0.0                 | 15.5 | ---- | 0.0     | 24.1 | ---- | 0.0      | 27.8 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 18              | 0.0                 | 1.4  | ---- | 5.6     | 3.4  | ---- | 5.6      | 5.7  | ---- |
| Cholecystectomy.....                       | 4               | 0.0                 | 0.9  | ---- | 0.0     | 1.5  | ---- | 0.0      | 2.0  | ---- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# SCHEURER HOSPITAL

Medicare Provider Number: 230201

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.4 years

Proportion female..... 51.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.2 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.0 %

Admitted for emergency..... 1.5 %

### COMORBIDITIES:

Cancer..... 7.5 %

Chronic cardiovascular disease..... 43.2 %

Chronic liver disease..... 1.5 %

Chronic renal disease..... 3.5 %

Chronic pulmonary disease..... 18.6 %

Cerebrovascular degeneration..... 2.0 %

Diabetes mellitus..... 9.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 89.7%

State ..... 8.5%

Outside State ..... 1.8%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.2 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 47

Occupancy Rate ..... 55.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 45.9 %

Case Mix Index (CMI) ..... 1.0358

### STAFFING:

Total Number of Physicians..... 4

Percent of Physicians Board  
Certified Specialists ..... 75.0 %

Medical Residents/Interns ..... 0

Registered Nurses ..... 16

Licensed Practical Nurses ..... 2

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SCHOOLCRAFT MEMORIAL HOSPITAL

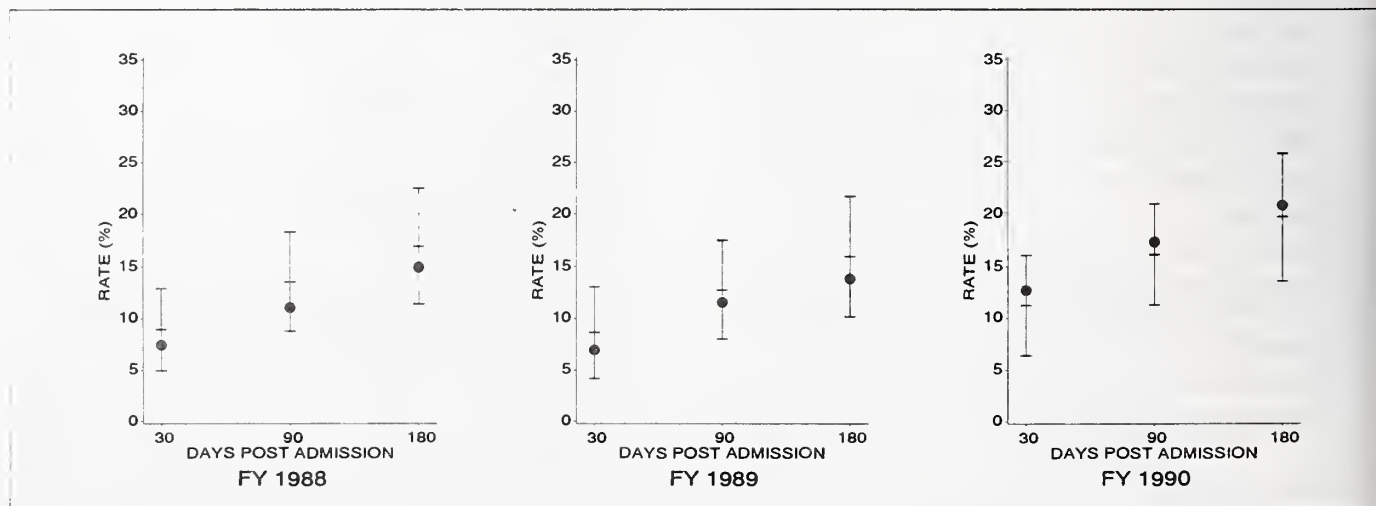
500 MAIN ST  
MANISTIQUE, MI 49854  
Medicare Provider Number: 230115

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 284                | 12.7                | 11.2 | 2.4   | 17.3    | 16.1 | 2.4   | 20.8     | 19.7 | 3.1   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 21                 | 23.8                | 24.8 | ----- | 23.8    | 28.3 | ----- | 23.8     | 31.1 | ----- |
| Congestive Heart Failure.....              | 18                 | 27.8                | 18.3 | ----- | 33.3    | 27.4 | ----- | 38.9     | 33.3 | ----- |
| Pneumonia/Influenza.....                   | 19                 | 36.8                | 19.4 | ----- | 42.1    | 27.1 | ----- | 47.4     | 32.1 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 11                 | 0.0                 | 9.4  | ----- | 0.0     | 15.6 | ----- | 0.0      | 20.6 | ----- |
| Transient Cerebral Ischemia.....           | 4                  | 0.0                 | 1.4  | ----- | 0.0     | 3.5  | ----- | 0.0      | 6.1  | ----- |
| Stroke.....                                | 19                 | 21.1                | 19.8 | ----- | 31.6    | 26.2 | ----- | 36.8     | 30.0 | ----- |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 2                  | 50.0                | 28.7 | ----- | 100.0   | 35.3 | ----- | 100.0    | 40.1 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 7                  | 0.0                 | 0.9  | ----- | 0.0     | 2.2  | ----- | 0.0      | 3.4  | ----- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.0  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SCHOOLCRAFT MEMORIAL HOSPITAL

Medicare Provider Number: 230115

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.4 years

Proportion female..... 57.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 34.2 %

Transferred from skilled nursing facility..... 1.1 %

Admitted for elective procedure..... 7.7 %

Admitted for emergency..... 63.7 %

### COMORBIDITIES:

Cancer..... 6.0 %

Chronic cardiovascular disease..... 30.6 %

Chronic liver disease..... 0.7 %

Chronic renal disease..... 6.3 %

Chronic pulmonary disease..... 11.6 %

Cerebrovascular degeneration..... 4.2 %

Diabetes mellitus..... 6.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 69.1%

State..... 28.7%

Outside State..... 2.2%

Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.0 Days

State..... 8.5 Days

National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 47

Occupancy Rate..... 21.0 %

Ownership/Control..... Local Government

Medicare Discharges..... 46.0 %

Case Mix Index (CMI)..... 0.9566

### STAFFING:

Total Number of Physicians..... 6

Percent of Physicians Board  
Certified Specialists..... 100.0 %

Medical Residents/Interns..... 0

Registered Nurses..... 20

Licensed Practical Nurses..... 13

### SPECIALTY SERVICES:

Burn Unit..... No

Cardiac Intensive Care..... No

Comprehensive Geriatric..... Yes

Hospice Care..... No

Medical/Surgical Intensive Care..... No

Organ/Tissue Transplant..... No

Other Intensive Care..... No

Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... No

Psychiatric..... No

Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

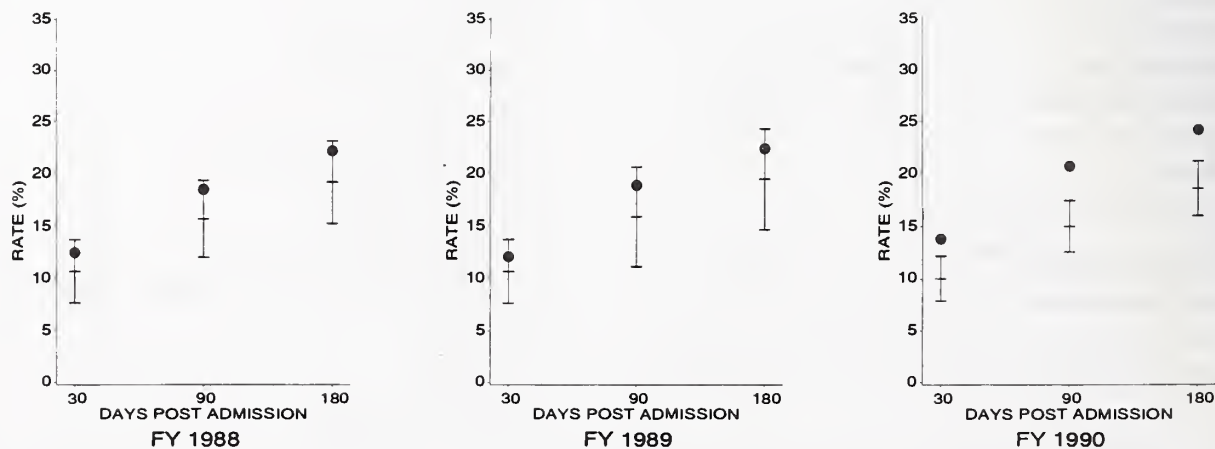
**SEAWAY HOSPITAL**  
5450 FORT STREET  
TRENTON, MI 48183  
Medicare Provider Number: 230176

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1027               | 13.8                | 10.0 | 1.1   | 20.7    | 15.0 | 1.2   | 24.2     | 18.6 | 1.3   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 33                 | 36.4                | 28.9 | ----- | 42.4    | 32.1 | ----- | 48.5     | 34.9 | ----- |
| Congestive Heart Failure.....              | 71                 | 26.8                | 14.5 | 7.0   | 38.0    | 23.0 | 7.8   | 43.7     | 29.3 | 7.6   |
| Pneumonia/Influenza.....                   | 60                 | 25.0                | 18.9 | 9.0   | 40.0    | 26.2 | 10.5  | 43.3     | 30.8 | 10.3  |
| Chronic Obstructive Pulmonary Disease..... | 9                  | 33.3                | 8.4  | ----- | 33.3    | 13.9 | ----- | 44.4     | 18.0 | ----- |
| Transient Cerebral Ischemia.....           | 13                 | 7.7                 | 1.4  | ----- | 7.7     | 3.2  | ----- | 7.7      | 5.3  | ----- |
| Stroke.....                                | 35                 | 22.9                | 18.4 | ----- | 34.3    | 26.1 | ----- | 37.1     | 29.9 | ----- |
| Hip Fracture.....                          | 25                 | 16.0                | 6.8  | ----- | 20.0    | 11.9 | ----- | 20.0     | 15.2 | ----- |
| Sepsis.....                                | 24                 | 37.5                | 28.8 | ----- | 62.5    | 38.2 | ----- | 62.5     | 44.2 | ----- |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 9                  | 44.4                | 5.7  | ----- | 44.4    | 10.5 | ----- | 44.4     | 14.3 | ----- |
| Carotid Endarterectomy.....                | 10                 | 0.0                 | 2.3  | ----- | 0.0     | 4.6  | ----- | 0.0      | 6.5  | ----- |
| Hip Replacement/Reconstruction.....        | 9                  | 11.1                | 3.4  | ----- | 11.1    | 6.6  | ----- | 11.1     | 9.4  | ----- |
| Open Reduction of Hip Fracture.....        | 12                 | 16.7                | 7.1  | ----- | 25.0    | 12.9 | ----- | 25.0     | 16.5 | ----- |
| Prostatectomy.....                         | 22                 | 0.0                 | 0.9  | ----- | 9.1     | 2.2  | ----- | 9.1      | 3.9  | ----- |
| Cholecystectomy.....                       | 28                 | 3.6                 | 1.0  | ----- | 3.6     | 1.6  | ----- | 3.6      | 2.1  | ----- |
| Hysterectomy.....                          | 4                  | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.4  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



# SEAWAY HOSPITAL

Medicare Provider Number: 230176

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.8 years |
| Proportion female.....        | 60.9 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 25.1 % |
| Transferred from skilled nursing facility..... | 0.4 %  |
| Admitted for elective procedure.....           | 11.6 % |
| Admitted for emergency.....                    | 37.7 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.1 %  |
| Chronic cardiovascular disease..... | 44.1 % |
| Chronic liver disease.....          | 0.9 %  |
| Chronic renal disease.....          | 5.1 %  |
| Chronic pulmonary disease.....      | 17.6 % |
| Cerebrovascular degeneration.....   | 2.7 %  |
| Diabetes mellitus.....              | 5.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 91.7%  |
| State .....         | 6.0%   |
| Outside State ..... | 2.3%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.5 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                    |
|----------------------------|--------------------|
| Total Beds .....           | 158                |
| Occupancy Rate .....       | 32.0 %             |
| Ownership/Control.....     | District/Authority |
| Medicare Discharges .....  | 49.8 %             |
| Case Mix Index (CMI) ..... | 1.1708             |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 114    |
| Percent of Physicians Board<br>Certified Specialists ..... | 56.1 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 89     |
| Licensed Practical Nurses .....                            | 12     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# SHERIDAN COMMUNITY HOSPITAL

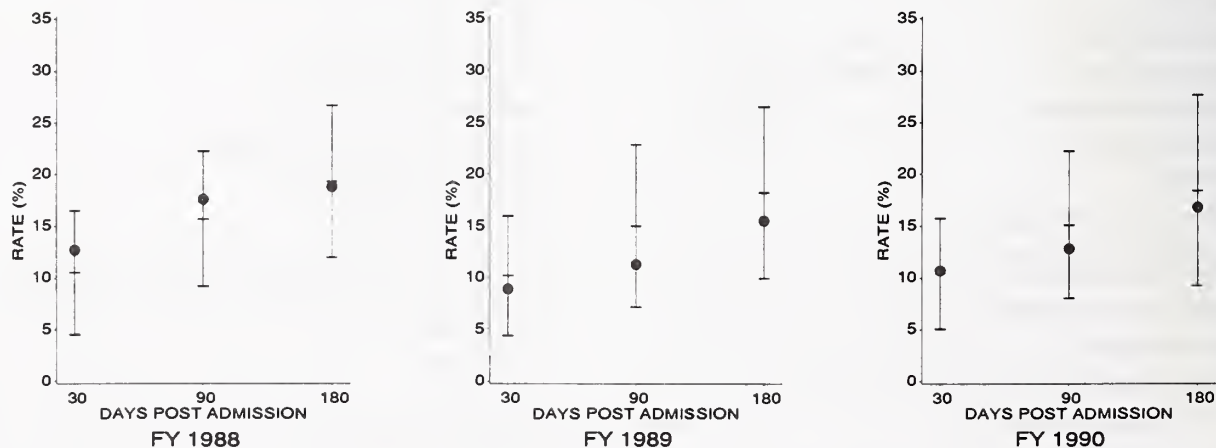
301 N MAIN STREET  
SHERIDAN, MI 48884  
Medicare Provider Number: 230178

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 149                | 10.7                | 10.4 | 2.7  | 12.8    | 15.1 | 3.6  | 16.8     | 18.4 | 4.6  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 9                  | 22.2                | 21.9 | ---- | 22.2    | 26.1 | ---- | 22.2     | 28.9 | ---- |
| Congestive Heart Failure.....              | 10                 | 10.0                | 14.5 | ---- | 10.0    | 22.4 | ---- | 10.0     | 28.8 | ---- |
| Pneumonia/Influenza.....                   | 23                 | 8.7                 | 10.6 | ---- | 8.7     | 14.8 | ---- | 13.0     | 17.9 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 3                  | 33.3                | 6.7  | ---- | 33.3    | 12.3 | ---- | 33.3     | 16.6 | ---- |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 3                  | 33.3                | 24.6 | ---- | 33.3    | 29.0 | ---- | 33.3     | 32.1 | ---- |
| Hip Fracture.....                          | 1                  | 0.0                 | 3.0  | ---- | 0.0     | 6.2  | ---- | 0.0      | 8.4  | ---- |
| Sepsis.....                                | 2                  | 0.0                 | 28.7 | ---- | 0.0     | 35.3 | ---- | 0.0      | 38.0 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 2                  | 0.0                 | 1.9  | ---- | 0.0     | 3.3  | ---- | 0.0      | 4.0  | ---- |
| Hysterectomy.....                          | 3                  | 0.0                 | 0.2  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SHERIDAN COMMUNITY HOSPITAL

Medicare Provider Number: 230178

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.4 years  
Proportion female..... 57.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 29.5 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 69.1 %

### COMORBIDITIES:

Cancer..... 3.4 %  
Chronic cardiovascular disease..... 41.6 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 3.4 %  
Chronic pulmonary disease..... 26.2 %  
Cerebrovascular degeneration..... 2.0 %  
Diabetes mellitus..... 7.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 80.3%  
State ..... 18.3%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 5.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 42  
Occupancy Rate ..... 16.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 36.8 %  
Case Mix Index (CMI) ..... 1.0640

### STAFFING:

Total Number of Physicians..... 10  
Percent of Physicians Board  
Certified Specialists ..... 20.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 16  
Licensed Practical Nurses ..... 18

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

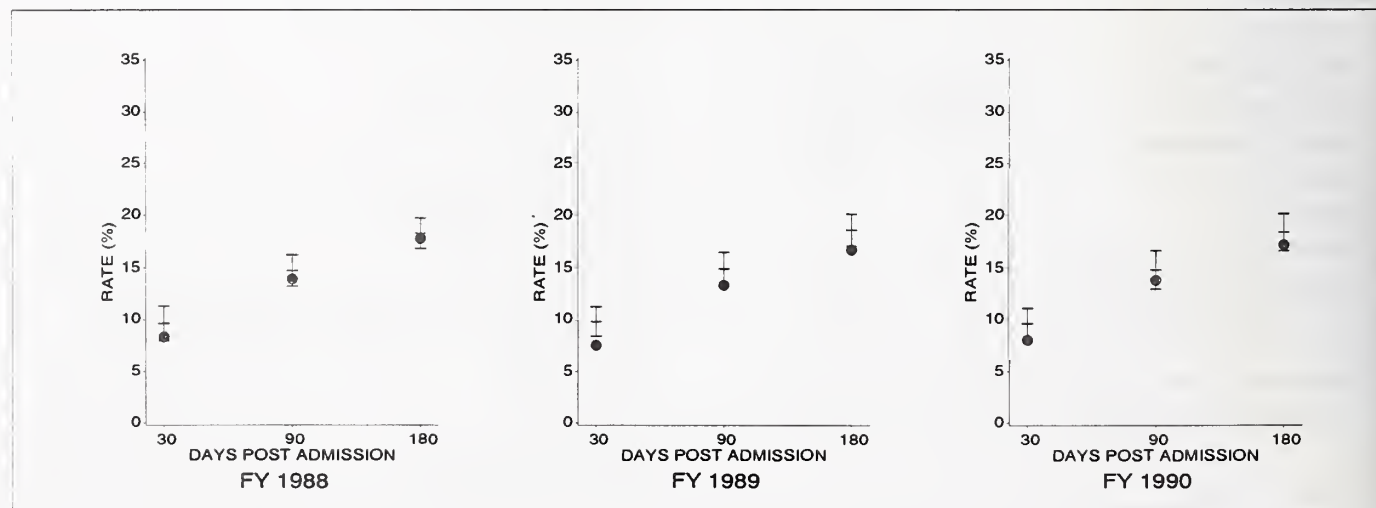
**SINAI HOSPITAL**  
6767 W OUTER DRIVE  
DETROIT, MI 48235  
Medicare Provider Number: 230024

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3399            | 8.0                 | 9.6  | 0.7   | 13.8    | 14.8 | 0.9   | 17.2     | 18.4 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 91              | 24.2                | 22.9 | 4.5   | 30.8    | 26.4 | 6.3   | 33.0     | 29.4 | 5.8   |
| Congestive Heart Failure.....              | 195             | 9.2                 | 14.2 | 3.8   | 21.5    | 22.9 | 3.8   | 25.1     | 29.4 | 4.1   |
| Pneumonia/Influenza.....                   | 135             | 20.7                | 18.0 | 4.5   | 27.4    | 24.9 | 4.2   | 28.1     | 29.1 | 4.0   |
| Chronic Obstructive Pulmonary Disease..... | 30              | 13.3                | 10.3 | ----- | 16.7    | 18.0 | ----- | 26.7     | 23.3 | ----- |
| Transient Cerebral Ischemia.....           | 42              | 0.0                 | 1.2  | ----- | 0.0     | 2.8  | ----- | 2.4      | 4.6  | ----- |
| Stroke.....                                | 139             | 12.9                | 15.8 | 4.4   | 20.1    | 22.5 | 4.2   | 24.5     | 26.1 | 4.3   |
| Hip Fracture.....                          | 61              | 4.9                 | 7.8  | 5.3   | 8.2     | 13.7 | 7.2   | 13.1     | 17.5 | 7.6   |
| Sepsis.....                                | 87              | 16.1                | 27.3 | 6.8   | 32.2    | 37.9 | 8.2   | 35.6     | 43.2 | 6.1   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 70              | 8.6                 | 3.1  | 3.0   | 8.6     | 4.3  | 3.1   | 10.0     | 5.3  | 3.3   |
| Coronary Artery Bypass Graft.....          | 129             | 3.9                 | 4.6  | 2.2   | 6.2     | 6.7  | 2.3   | 7.0      | 7.6  | 2.4   |
| Initial Pacemaker Insertion.....           | 36              | 0.0                 | 3.3  | ----- | 2.8     | 7.0  | ----- | 8.3      | 10.6 | ----- |
| Carotid Endarterectomy.....                | 8               | 0.0                 | 0.9  | ----- | 12.5    | 1.6  | ----- | 12.5     | 2.4  | ----- |
| Hip Replacement/Reconstruction.....        | 44              | 4.5                 | 3.2  | ----- | 4.5     | 6.0  | ----- | 9.1      | 8.1  | ----- |
| Open Reduction of Hip Fracture.....        | 32              | 3.1                 | 8.3  | ----- | 6.3     | 14.8 | ----- | 6.3      | 18.9 | ----- |
| Prostatectomy.....                         | 107             | 0.0                 | 0.8  | 1.2   | 0.9     | 1.9  | 1.8   | 1.9      | 3.2  | 2.5   |
| Cholecystectomy.....                       | 33              | 6.1                 | 1.8  | ----- | 6.1     | 3.1  | ----- | 6.1      | 4.0  | ----- |
| Hysterectomy.....                          | 37              | 0.0                 | 0.7  | ----- | 2.7     | 1.7  | ----- | 5.4      | 2.8  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**SINAI HOSPITAL**  
Medicare Provider Number: 230024

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 74.2 years  
Proportion female..... 56.7 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 43.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 22.4 %  
Admitted for emergency..... 52.4 %

**COMORBIDITIES:**

Cancer..... 9.0 %  
Chronic cardiovascular disease..... 29.4 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 3.0 %  
Chronic pulmonary disease..... 8.3 %  
Cerebrovascular degeneration..... 4.3 %  
Diabetes mellitus..... 9.9 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 62.5%  
State ..... 35.6%  
Outside State ..... 1.9%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 478  
Occupancy Rate ..... 73.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.6 %  
Case Mix Index (CMI) ..... 1.4743

**STAFFING:**

Total Number of Physicians..... 683  
Percent of Physicians Board  
Certified Specialists ..... 75.1 %  
Medical Residents/Interns ..... 163  
Registered Nurses..... 466  
Licensed Practical Nurses ..... 71

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# SOUTH HAVEN COMMUNITY HOSPITAL

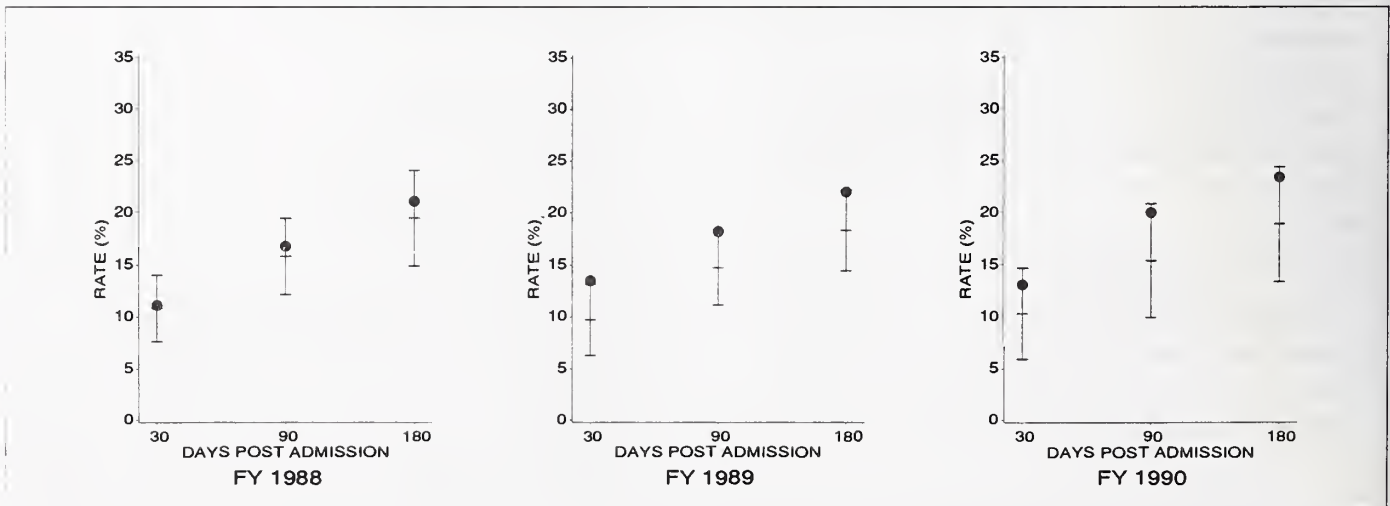
955 S BAILEY AVE  
SOUTH HAVEN, MI 49090  
Medicare Provider Number: 230085

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 435             | 13.1                | 10.3 | 2.2  | 20.0    | 15.4 | 2.7  | 23.4     | 18.9 | 2.8  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 14              | 42.9                | 27.6 | ---- | 57.1    | 31.6 | ---- | 57.1     | 35.2 | ---- |
| Congestive Heart Failure.....              | 37              | 24.3                | 13.8 | ---- | 32.4    | 22.2 | ---- | 35.1     | 28.0 | ---- |
| Pneumonia/Influenza.....                   | 35              | 22.9                | 16.8 | ---- | 25.7    | 22.6 | ---- | 31.4     | 26.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 3               | 0.0                 | 4.5  | ---- | 0.0     | 8.4  | ---- | 0.0      | 11.3 | ---- |
| Transient Cerebral Ischemia.....           | 7               | 0.0                 | 1.5  | ---- | 0.0     | 3.3  | ---- | 0.0      | 5.1  | ---- |
| Stroke.....                                | 14              | 35.7                | 21.2 | ---- | 35.7    | 28.4 | ---- | 35.7     | 32.4 | ---- |
| Hip Fracture.....                          | 9               | 11.1                | 6.2  | ---- | 22.2    | 10.8 | ---- | 55.6     | 14.5 | ---- |
| Sepsis.....                                | 5               | 20.0                | 32.1 | ---- | 20.0    | 38.8 | ---- | 40.0     | 42.7 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 3               | 33.3                | 7.3  | ---- | 33.3    | 12.2 | ---- | 66.7     | 15.6 | ---- |
| Open Reduction of Hip Fracture.....        | 6               | 0.0                 | 5.5  | ---- | 16.7    | 10.0 | ---- | 50.0     | 13.9 | ---- |
| Prostatectomy.....                         | 9               | 0.0                 | 1.0  | ---- | 11.1    | 2.2  | ---- | 11.1     | 3.7  | ---- |
| Cholecystectomy.....                       | 11              | 0.0                 | 2.2  | ---- | 0.0     | 3.9  | ---- | 0.0      | 5.1  | ---- |
| Hysterectomy.....                          | 4               | 0.0                 | 0.8  | ---- | 0.0     | 1.6  | ---- | 0.0      | 2.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# SOUTH HAVEN COMMUNITY HOSPITAL

Medicare Provider Number: 230085

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 76.3 years  
Proportion female..... 55.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.4 %  
Transferred from skilled nursing facility..... 1.4 %  
Admitted for elective procedure..... 10.3 %  
Admitted for emergency..... 16.9 %

### COMORBIDITIES:

Cancer..... 5.0 %  
Chronic cardiovascular disease..... 42.6 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 3.4 %  
Chronic pulmonary disease..... 11.0 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 88.6%  
State ..... 9.3%  
Outside State ..... 2.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.6 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 50  
Occupancy Rate ..... 44.0 %  
Ownership/Control..... District/Authority  
Medicare Discharges .....(Not Available)  
Case Mix Index (CMI) ..... 1.2008

### STAFFING:

Total Number of Physicians..... 28  
Percent of Physicians Board  
Certified Specialists ..... 60.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 43  
Licensed Practical Nurses ..... 7

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# SOUTHWEST DETROIT HOSPITAL

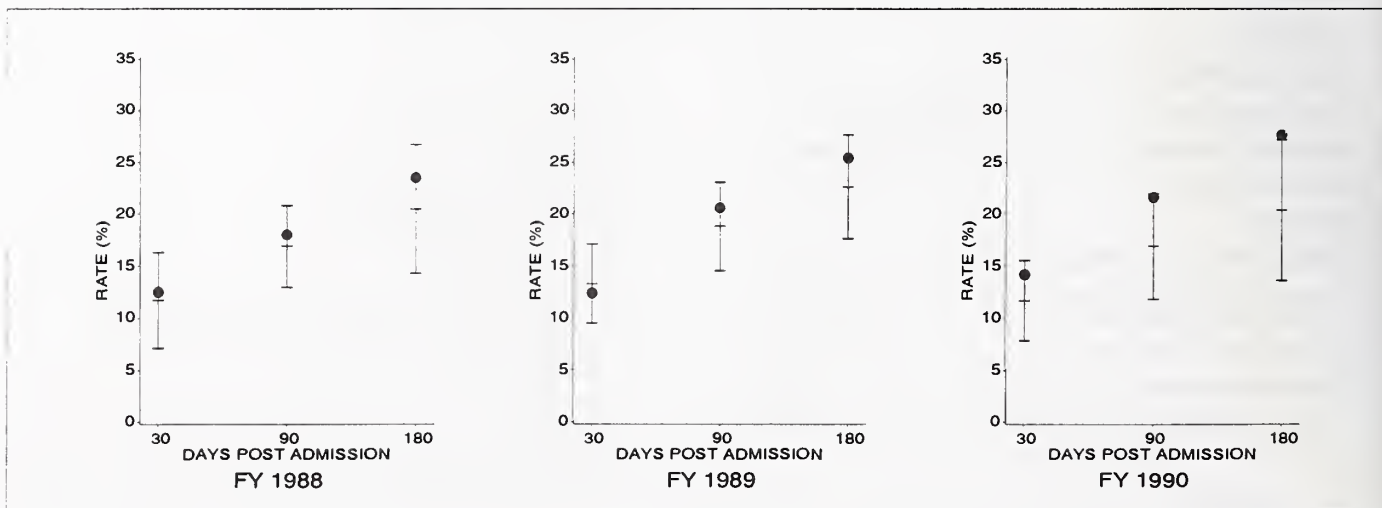
2401 20TH ST  
DETROIT, MI 48226  
Medicare Provider Number: 230266

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 366                | 14.2                | 11.7 | 1.9  | 21.6    | 16.9 | 2.5  | 27.6     | 20.4 | 3.4  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 10                 | 20.0                | 27.8 | ---- | 30.0    | 30.1 | ---- | 30.0     | 32.4 | ---- |
| Congestive Heart Failure.....              | 33                 | 12.1                | 11.0 | ---- | 27.3    | 17.7 | ---- | 33.3     | 22.8 | ---- |
| Pneumonia/Influenza.....                   | 23                 | 17.4                | 17.9 | ---- | 26.1    | 23.4 | ---- | 34.8     | 27.2 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 6                  | 16.7                | 17.6 | ---- | 33.3    | 26.2 | ---- | 50.0     | 31.4 | ---- |
| Transient Cerebral Ischemia.....           | 2                  | 0.0                 | 1.7  | ---- | 0.0     | 3.5  | ---- | 0.0      | 5.9  | ---- |
| Stroke.....                                | 28                 | 28.6                | 16.6 | ---- | 39.3    | 23.5 | ---- | 46.4     | 27.0 | ---- |
| Hip Fracture.....                          | 6                  | 16.7                | 8.5  | ---- | 16.7    | 13.4 | ---- | 33.3     | 16.8 | ---- |
| Sepsis.....                                | 1                  | 0.0                 | 12.0 | ---- | 0.0     | 15.1 | ---- | 0.0      | 19.2 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 1                  | 100.0               | 14.4 | ---- | 100.0   | 19.9 | ---- | 100.0    | 22.1 | ---- |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 2                  | 0.0                 | 3.7  | ---- | 0.0     | 7.1  | ---- | 0.0      | 9.6  | ---- |
| Open Reduction of Hip Fracture.....        | 3                  | 0.0                 | 9.9  | ---- | 0.0     | 15.9 | ---- | 33.3     | 19.4 | ---- |
| Prostatectomy.....                         | 12                 | 0.0                 | 2.3  | ---- | 8.3     | 5.3  | ---- | 8.3      | 8.2  | ---- |
| Cholecystectomy.....                       | 2                  | 0.0                 | 0.4  | ---- | 0.0     | 0.8  | ---- | 0.0      | 1.1  | ---- |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# SOUTHWEST DETROIT HOSPITAL

Medicare Provider Number: 230266

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 71.3 years  
Proportion female..... 46.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 13.4 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 9.3 %  
Admitted for emergency..... 78.4 %

### COMORBIDITIES:

Cancer..... 5.2 %  
Chronic cardiovascular disease..... 33.1 %  
Chronic liver disease..... 1.6 %  
Chronic renal disease..... 3.8 %  
Chronic pulmonary disease..... 12.0 %  
Cerebrovascular degeneration..... 3.8 %  
Diabetes mellitus..... 22.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 97.7%  
State ..... 1.5%  
Outside State ..... 0.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 11.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 216  
Occupancy Rate ..... 50.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 22.9 %  
Case Mix Index (CMI) ..... 1.3096

### STAFFING:

Total Number of Physicians..... 130  
Percent of Physicians Board  
Certified Specialists ..... 66.2 %  
Medical Residents/Interns ..... 4  
Registered Nurses..... 77  
Licensed Practical Nurses ..... 15

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST FRANCIS HOSPITAL

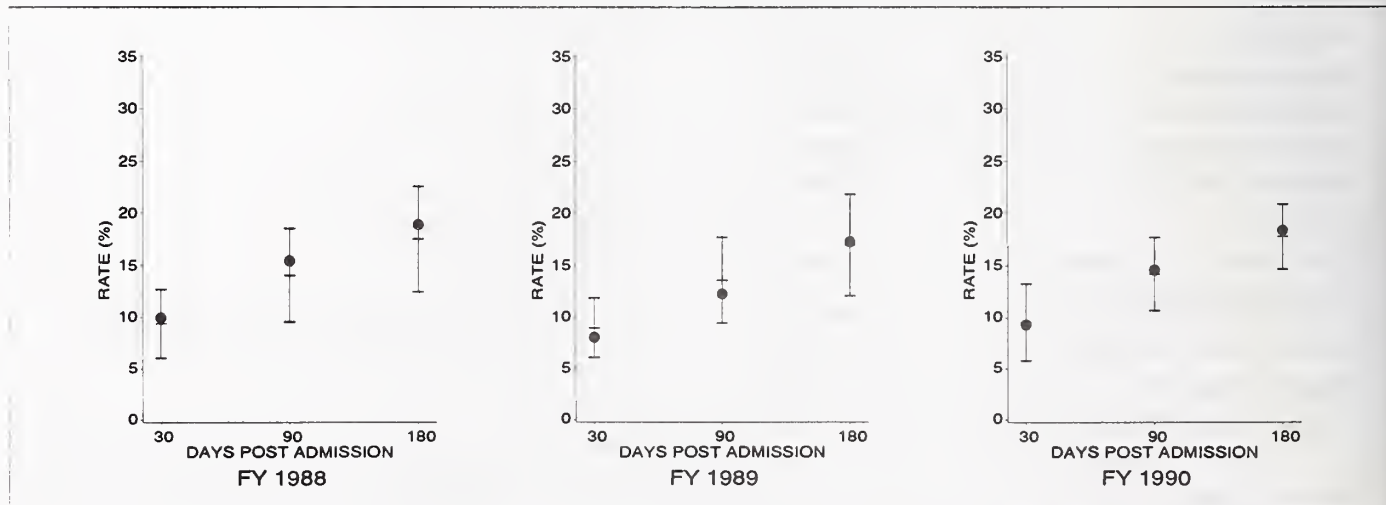
3401 LUDINGTON ST  
 ESCANABA, MI 49829  
 Medicare Provider Number: 230101

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 821                | 9.3                 | 9.5  | 1.9  | 14.6    | 14.2 | 1.8  | 18.4     | 17.8 | 1.6  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 36                 | 25.0                | 24.8 | ---- | 27.8    | 28.2 | ---- | 33.3     | 30.9 | ---- |
| Congestive Heart Failure.....              | 39                 | 10.3                | 13.7 | ---- | 17.9    | 21.6 | ---- | 23.1     | 27.3 | ---- |
| Pneumonia/Influenza.....                   | 60                 | 18.3                | 15.8 | 7.3  | 25.0    | 21.8 | 8.1  | 36.7     | 26.3 | 10.1 |
| Chronic Obstructive Pulmonary Disease..... | 6                  | 16.7                | 10.5 | ---- | 16.7    | 16.6 | ---- | 16.7     | 21.2 | ---- |
| Transient Cerebral Ischemia.....           | 10                 | 10.0                | 1.8  | ---- | 20.0    | 4.3  | ---- | 20.0     | 7.2  | ---- |
| Stroke.....                                | 43                 | 18.6                | 18.7 | ---- | 27.9    | 25.0 | ---- | 30.2     | 28.8 | ---- |
| Hip Fracture.....                          | 26                 | 7.7                 | 7.7  | ---- | 7.7     | 13.0 | ---- | 7.7      | 16.5 | ---- |
| Sepsis.....                                | 7                  | 42.9                | 33.0 | ---- | 42.9    | 41.8 | ---- | 42.9     | 46.7 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 12                 | 0.0                 | 5.8  | ---- | 0.0     | 10.3 | ---- | 0.0      | 13.4 | ---- |
| Open Reduction of Hip Fracture.....        | 9                  | 11.1                | 7.8  | ---- | 11.1    | 13.9 | ---- | 11.1     | 17.9 | ---- |
| Prostatectomy.....                         | 45                 | 4.4                 | 0.6  | ---- | 6.7     | 1.4  | ---- | 8.9      | 2.6  | ---- |
| Cholecystectomy.....                       | 30                 | 3.3                 | 3.2  | ---- | 6.7     | 5.9  | ---- | 6.7      | 8.2  | ---- |
| Hysterectomy.....                          | 6                  | 0.0                 | 0.3  | ---- | 0.0     | 0.8  | ---- | 0.0      | 1.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST FRANCIS HOSPITAL

Medicare Provider Number: 230101

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.9 years  
Proportion female..... 52.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 30.3 %  
Transferred from skilled nursing facility..... 2.6 %  
Admitted for elective procedure..... 13.5 %  
Admitted for emergency..... 69.2 %

### COMORBIDITIES:

Cancer..... 6.9 %  
Chronic cardiovascular disease..... 34.6 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 2.3 %  
Chronic pulmonary disease..... 17.2 %  
Cerebrovascular degeneration..... 4.1 %  
Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 89.1 %  
State ..... 8.8 %  
Outside State ..... 2.1 %  
Total ..... 100.0 %

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 66  
Occupancy Rate ..... 62.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 41.8 %  
Case Mix Index (CMI) ..... 1.0858

### STAFFING:

Total Number of Physicians..... 38  
Percent of Physicians Board  
Certified Specialists ..... 97.4 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 59  
Licensed Practical Nurses ..... 25

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOHN HOSPITAL & MEDICAL CENTER

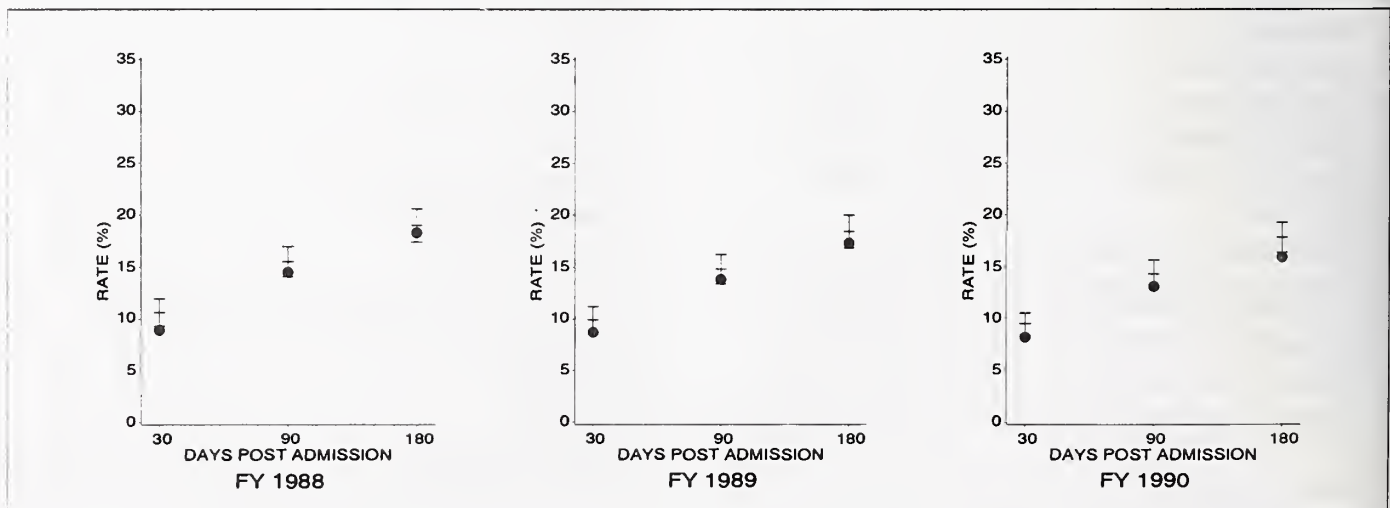
22101 MOROSS RD  
DETROIT, MI 48236  
Medicare Provider Number: 230165

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 4576            | 8.2                 | 9.5  | 0.5  | 13.1    | 14.3 | 0.7  | 15.9     | 17.8 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 150             | 18.7                | 25.1 | 5.8  | 22.7    | 27.9 | 5.4  | 26.7     | 30.5 | 5.4  |
| Congestive Heart Failure.....              | 230             | 12.6                | 14.9 | 2.7  | 20.9    | 23.6 | 3.8  | 25.2     | 29.9 | 4.6  |
| Pneumonia/Influenza.....                   | 164             | 15.2                | 17.3 | 3.3  | 20.1    | 23.6 | 4.3  | 23.8     | 27.8 | 5.2  |
| Chronic Obstructive Pulmonary Disease..... | 63              | 17.5                | 10.9 | 5.1  | 25.4    | 17.5 | 5.6  | 25.4     | 22.6 | 5.4  |
| Transient Cerebral Ischemia.....           | 64              | 0.0                 | 2.5  | 3.1  | 1.6     | 5.3  | 4.4  | 3.1      | 8.3  | 5.8  |
| Stroke.....                                | 163             | 16.6                | 21.0 | 4.2  | 25.2    | 27.1 | 4.1  | 29.4     | 30.7 | 3.7  |
| Hip Fracture.....                          | 92              | 6.5                 | 8.4  | 3.3  | 15.2    | 14.2 | 3.8  | 17.4     | 17.9 | 4.6  |
| Sepsis.....                                | 30              | 26.7                | 29.5 | ---- | 36.7    | 37.8 | ---- | 50.0     | 43.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 112             | 0.0                 | 2.1  | 2.4  | 0.0     | 2.9  | 2.9  | 0.9      | 3.7  | 2.6  |
| Coronary Artery Bypass Graft.....          | 326             | 2.5                 | 5.4  | 1.8  | 3.4     | 7.5  | 2.2  | 4.3      | 8.5  | 2.3  |
| Initial Pacemaker Insertion.....           | 34              | 2.9                 | 2.9  | ---- | 5.9     | 5.2  | ---- | 5.9      | 7.5  | ---- |
| Carotid Endarterectomy.....                | 29              | 0.0                 | 1.2  | ---- | 0.0     | 2.2  | ---- | 3.4      | 3.3  | ---- |
| Hip Replacement/Reconstruction.....        | 86              | 0.0                 | 4.0  | 4.1  | 9.3     | 7.1  | 3.3  | 10.5     | 9.3  | 4.4  |
| Open Reduction of Hip Fracture.....        | 36              | 5.6                 | 7.3  | ---- | 8.3     | 12.9 | ---- | 11.1     | 16.4 | ---- |
| Prostatectomy.....                         | 154             | 0.0                 | 0.9  | 1.2  | 0.0     | 2.0  | 2.4  | 0.6      | 3.3  | 3.2  |
| Cholecystectomy.....                       | 85              | 1.2                 | 3.5  | 2.8  | 4.7     | 6.3  | 3.7  | 5.9      | 8.2  | 4.5  |
| Hysterectomy.....                          | 67              | 3.0                 | 0.5  | 2.4  | 3.0     | 1.1  | 2.1  | 3.0      | 1.7  | 2.0  |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST JOHN HOSPITAL & MEDICAL CENTER

Medicare Provider Number: 230165

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.7 years

Proportion female..... 53.6 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.9 %

Transferred from skilled nursing facility..... 0.2 %

Admitted for elective procedure..... 20.9 %

Admitted for emergency..... 57.0 %

### COMORBIDITIES:

Cancer..... 8.7 %

Chronic cardiovascular disease..... 47.6 %

Chronic liver disease..... 0.9 %

Chronic renal disease..... 3.0 %

Chronic pulmonary disease..... 13.5 %

Cerebrovascular degeneration..... 2.7 %

Diabetes mellitus..... 7.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 43.7%

State ..... 54.8%

Outside State ..... 1.5%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 10.4 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 565

Occupancy Rate ..... 83.0 %

Ownership/Control..... Church

Medicare Discharges ..... 32.7 %

Case Mix Index (CMI) ..... 1.6497

### STAFFING:

Total Number of Physicians..... 285

Percent of Physicians Board  
Certified Specialists..... 88.4 %

Medical Residents/Interns ..... 105

Registered Nurses..... 692

Licensed Practical Nurses ..... 111

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... Yes

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... Yes

Other Intensive Care ..... No

Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOHN HOSPITAL-MACOMB CENTER

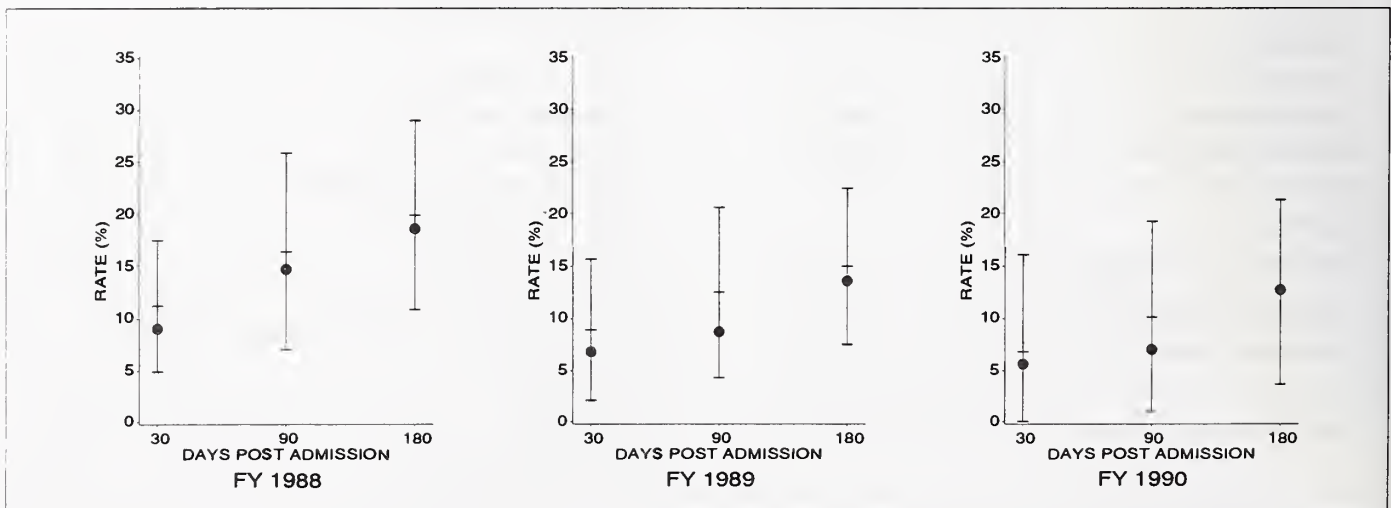
26755 BALLARD ROAD  
MT CLEMENS, MI 48045  
Medicare Provider Number: 230257

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 71              | 5.6                 | 6.8  | 4.7  | 7.0     | 10.1 | 4.6  | 12.7     | 12.5 | 4.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 1               | 0.0                 | 53.6 | ---- | 0.0     | 59.6 | ---- | 0.0      | 67.2 | ---- |
| Congestive Heart Failure.....              | 2               | 0.0                 | 15.2 | ---- | 0.0     | 24.8 | ---- | 0.0      | 30.4 | ---- |
| Pneumonia/Influenza.....                   | 6               | 16.7                | 15.5 | ---- | 16.7    | 20.9 | ---- | 50.0     | 24.3 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 2               | 0.0                 | 10.2 | ---- | 50.0    | 16.8 | ---- | 50.0     | 22.0 | ---- |
| Transient Cerebral Ischemia.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 1               | 0.0                 | 21.9 | ---- | 0.0     | 29.0 | ---- | 0.0      | 32.9 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 2               | 50.0                | 34.7 | ---- | 50.0    | 44.3 | ---- | 50.0     | 51.4 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 1               | 0.0                 | 0.8  | ---- | 0.0     | 1.9  | ---- | 0.0      | 3.5  | ---- |
| Cholecystectomy.....                       | 1               | 100.0               | 11.8 | ---- | 100.0   | 17.0 | ---- | 100.0    | 20.2 | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST JOHN HOSPITAL-MACOMB CENTER

Medicare Provider Number: 230257

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 68.8 years  
Proportion female..... 54.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 52.1 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 35.2 %  
Admitted for emergency..... 42.3 %

### COMORBIDITIES:

Cancer..... 4.2 %  
Chronic cardiovascular disease..... 22.5 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 11.3 %  
Cerebrovascular degeneration..... 5.6 %  
Diabetes mellitus..... 12.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 74.1%  
State ..... 25.0%  
Outside State ..... 0.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 96  
Occupancy Rate ..... 34.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 36.1 %  
Case Mix Index (CMI) ..... 0.9041

### STAFFING:

Total Number of Physicians..... 52  
Percent of Physicians Board  
Certified Specialists ..... 57.7 %  
Medical Residents/Interns ..... 6  
Registered Nurses..... 50  
Licensed Practical Nurses ..... 6

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOSEPH HOSPITAL

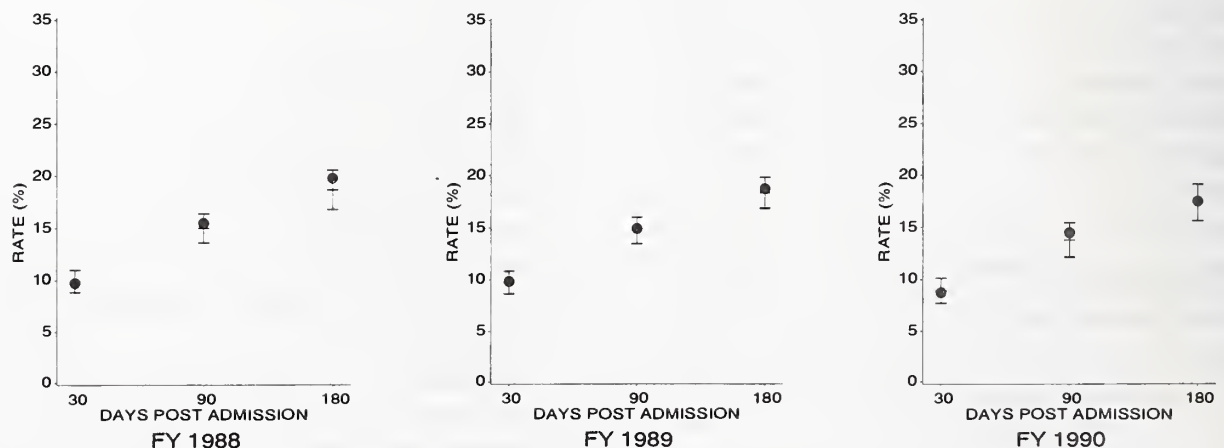
302 KENSINGTON AVE  
FLINT, MI 48502  
Medicare Provider Number: 230068

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3180            | 8.7                 | 8.9  | 0.6  | 14.5    | 13.8 | 0.8  | 17.5     | 17.4 | 0.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 94              | 30.9                | 24.9 | 8.4  | 31.9    | 27.4 | 8.4  | 33.0     | 29.8 | 9.0  |
| Congestive Heart Failure.....              | 213             | 16.0                | 15.1 | 3.8  | 29.6    | 24.1 | 5.1  | 35.2     | 30.5 | 4.7  |
| Pneumonia/Influenza.....                   | 138             | 13.8                | 17.1 | 3.9  | 21.7    | 23.5 | 4.6  | 29.0     | 27.6 | 4.2  |
| Chronic Obstructive Pulmonary Disease..... | 63              | 6.3                 | 11.3 | 6.2  | 19.0    | 18.3 | 7.7  | 23.8     | 23.3 | 7.9  |
| Transient Cerebral Ischemia.....           | 71              | 1.4                 | 2.1  | 3.9  | 5.6     | 4.7  | 3.8  | 7.0      | 7.6  | 3.8  |
| Stroke.....                                | 124             | 16.1                | 19.5 | 5.9  | 22.6    | 26.5 | 7.6  | 26.6     | 30.3 | 7.8  |
| Hip Fracture.....                          | 71              | 4.2                 | 7.2  | 3.6  | 7.0     | 12.8 | 5.1  | 9.9      | 16.5 | 5.8  |
| Sepsis.....                                | 26              | 38.5                | 24.8 | ---- | 42.3    | 32.5 | ---- | 42.3     | 37.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 13              | 0.0                 | 1.1  | ---- | 0.0     | 1.7  | ---- | 0.0      | 2.3  | ---- |
| Coronary Artery Bypass Graft.....          | 54              | 5.6                 | 5.9  | 3.2  | 9.3     | 8.0  | 4.1  | 9.3      | 9.0  | 5.3  |
| Initial Pacemaker Insertion.....           | 15              | 6.7                 | 2.2  | ---- | 6.7     | 4.3  | ---- | 6.7      | 6.3  | ---- |
| Carotid Endarterectomy.....                | 52              | 0.0                 | 1.4  | 2.1  | 0.0     | 2.7  | 3.1  | 0.0      | 4.0  | 4.0  |
| Hip Replacement/Reconstruction.....        | 41              | 2.4                 | 3.9  | ---- | 2.4     | 7.1  | ---- | 7.3      | 9.4  | ---- |
| Open Reduction of Hip Fracture.....        | 38              | 2.6                 | 6.7  | ---- | 7.9     | 12.3 | ---- | 13.2     | 16.2 | ---- |
| Prostatectomy.....                         | 147             | 0.7                 | 0.8  | 0.7  | 2.0     | 1.8  | 1.3  | 2.0      | 3.1  | 1.7  |
| Cholecystectomy.....                       | 49              | 2.0                 | 3.4  | ---- | 4.1     | 6.8  | ---- | 4.1      | 9.4  | ---- |
| Hysterectomy.....                          | 32              | 3.1                 | 0.7  | ---- | 3.1     | 1.5  | ---- | 3.1      | 2.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST JOSEPH HOSPITAL

Medicare Provider Number: 230068

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.3 years  
Proportion female..... 56.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 37.1 %  
Transferred from skilled nursing facility..... 0.3 %  
Admitted for elective procedure..... 10.0 %  
Admitted for emergency..... 52.5 %

### COMORBIDITIES:

Cancer..... 8.2 %  
Chronic cardiovascular disease..... 39.9 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 2.6 %  
Chronic pulmonary disease..... 16.0 %  
Cerebrovascular degeneration..... 4.7 %  
Diabetes mellitus..... 7.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.3%  
State ..... 11.3%  
Outside State ..... 2.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 423  
Occupancy Rate ..... 61.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 31.6 %  
Case Mix Index (CMI) ..... 1.2751

### STAFFING:

Total Number of Physicians..... 253  
Percent of Physicians Board  
Certified Specialists..... 78.7 %  
Medical Residents/Interns ..... 45  
Registered Nurses..... 273  
Licensed Practical Nurses ..... 133

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... Yes  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOSEPH HOSPITAL EAST WEST

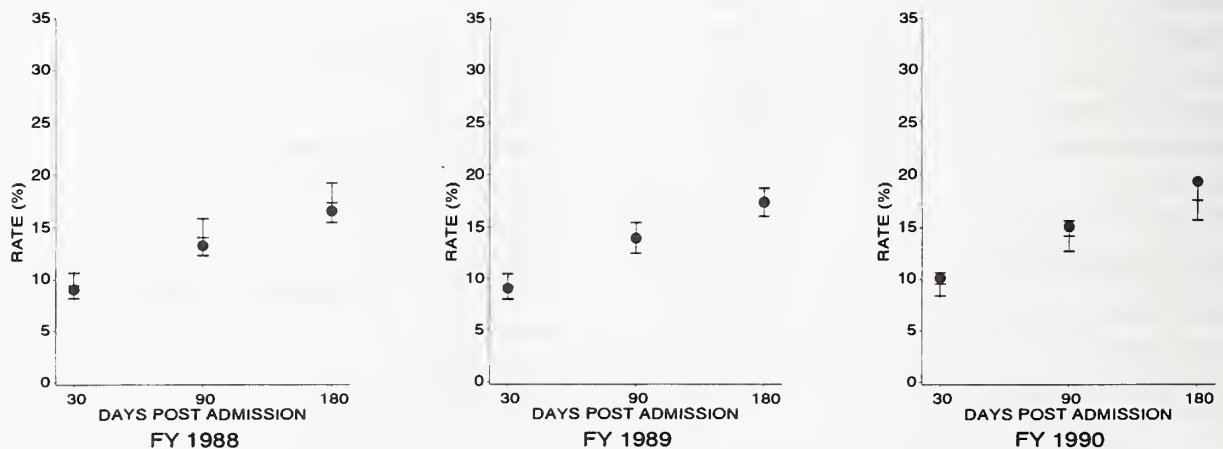
215 NORTH AVENUE  
MT CLEMENS, MI 48043  
Medicare Provider Number: 230047

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3121            | 10.1                | 9.5  | 0.6  | 15.1    | 14.2 | 0.7  | 19.4     | 17.6 | 0.9  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 121             | 28.9                | 25.5 | 5.4  | 35.5    | 28.5 | 6.7  | 38.0     | 31.2 | 7.2  |
| Congestive Heart Failure.....              | 163             | 16.6                | 15.2 | 2.9  | 29.4    | 24.2 | 4.2  | 37.4     | 30.7 | 5.1  |
| Pneumonia/Influenza.....                   | 169             | 23.7                | 18.1 | 6.8  | 28.4    | 24.5 | 6.8  | 32.5     | 28.7 | 6.2  |
| Chronic Obstructive Pulmonary Disease..... | 67              | 10.4                | 9.8  | 5.7  | 20.9    | 16.4 | 8.3  | 26.9     | 21.3 | 9.1  |
| Transient Cerebral Ischemia.....           | 98              | 3.1                 | 1.7  | 2.2  | 3.1     | 3.7  | 3.0  | 8.2      | 5.9  | 2.9  |
| Stroke.....                                | 193             | 19.7                | 18.7 | 3.1  | 27.5    | 25.0 | 5.2  | 32.6     | 28.6 | 5.2  |
| Hip Fracture.....                          | 85              | 4.7                 | 6.5  | 3.9  | 9.4     | 11.5 | 5.6  | 11.8     | 15.0 | 5.9  |
| Sepsis.....                                | 41              | 9.8                 | 26.5 | ---- | 24.4    | 34.5 | ---- | 24.4     | 39.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 1               | 0.0                 | 8.0  | ---- | 0.0     | 9.0  | ---- | 0.0      | 9.7  | ---- |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 26              | 0.0                 | 2.2  | ---- | 0.0     | 4.5  | ---- | 3.8      | 6.6  | ---- |
| Carotid Endarterectomy.....                | 39              | 0.0                 | 1.4  | ---- | 0.0     | 2.6  | ---- | 2.6      | 3.8  | ---- |
| Hip Replacement/Reconstruction.....        | 73              | 5.5                 | 3.0  | 3.2  | 5.5     | 5.4  | 2.9  | 5.5      | 7.2  | 3.4  |
| Open Reduction of Hip Fracture.....        | 35              | 2.9                 | 5.7  | ---- | 5.7     | 10.4 | ---- | 11.4     | 13.8 | ---- |
| Prostatectomy.....                         | 128             | 0.8                 | 0.6  | 1.0  | 0.8     | 1.5  | 1.8  | 3.1      | 2.7  | 1.7  |
| Cholecystectomy.....                       | 59              | 3.4                 | 2.0  | 2.5  | 5.1     | 3.5  | 3.4  | 5.1      | 4.5  | 3.7  |
| Hysterectomy.....                          | 10              | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST JOSEPH HOSPITAL EAST WEST

Medicare Provider Number: 230047

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.0 years  
Proportion female..... 58.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 32.6 %  
Transferred from skilled nursing facility..... 0.5 %  
Admitted for elective procedure..... 16.9 %  
Admitted for emergency..... 64.8 %

### COMORBIDITIES:

Cancer..... 7.0 %  
Chronic cardiovascular disease..... 34.8 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 1.9 %  
Chronic pulmonary disease..... 11.7 %  
Cerebrovascular degeneration..... 3.3 %  
Diabetes mellitus..... 8.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.0%  
State ..... 12.0%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 632  
Occupancy Rate ..... 81.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 38.9 %  
Case Mix Index (CMI) ..... 1.2093

### STAFFING:

Total Number of Physicians..... 260  
Percent of Physicians Board  
Certified Specialists..... 69.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 403  
Licensed Practical Nurses ..... 78

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOSEPH MERCY HOSPITAL

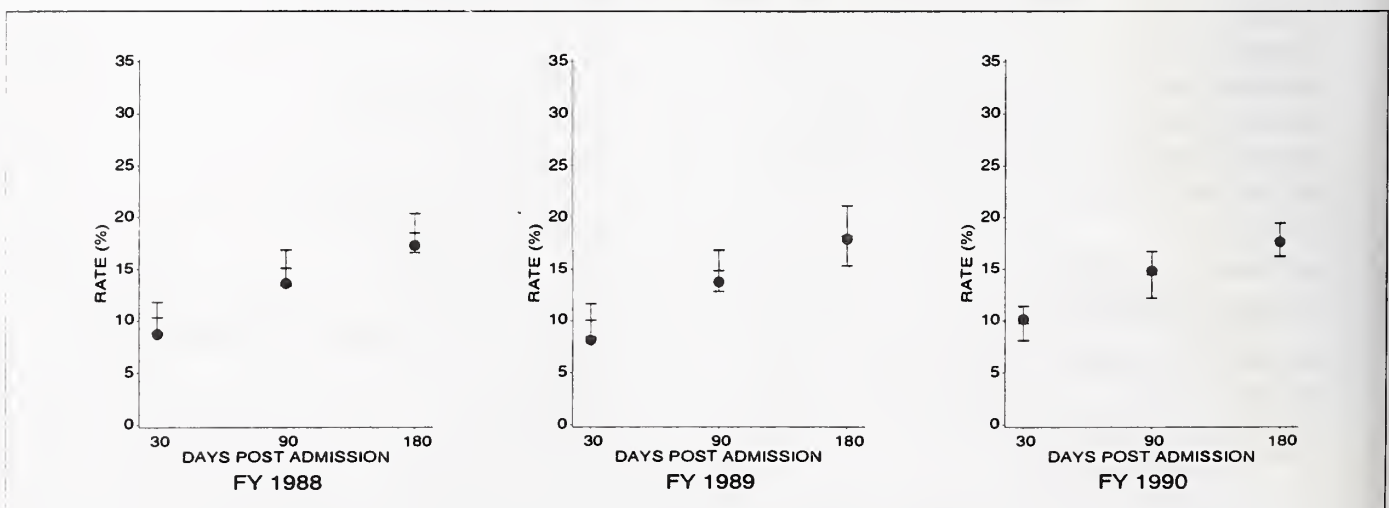
900 WOODWARD AVE  
PONTIAC, MI 48053  
Medicare Provider Number: 230029

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3181            | 10.1                | 9.7  | 0.8   | 14.8    | 14.4 | 1.1   | 17.6     | 17.8 | 0.8   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 126             | 21.4                | 25.3 | 7.5   | 23.8    | 28.5 | 7.6   | 27.0     | 31.1 | 7.0   |
| Congestive Heart Failure.....              | 182             | 12.1                | 14.3 | 3.8   | 23.6    | 22.7 | 3.5   | 29.1     | 28.9 | 3.5   |
| Pneumonia/Influenza.....                   | 111             | 21.6                | 15.4 | 4.7   | 28.8    | 21.2 | 6.4   | 32.4     | 25.0 | 7.1   |
| Chronic Obstructive Pulmonary Disease..... | 28              | 10.7                | 10.2 | ----- | 10.7    | 16.7 | ----- | 14.3     | 21.3 | ----- |
| Transient Cerebral Ischemia.....           | 56              | 0.0                 | 1.9  | 2.4   | 1.8     | 4.1  | 3.0   | 1.8      | 6.3  | 4.4   |
| Stroke.....                                | 138             | 21.0                | 20.4 | 3.8   | 28.3    | 26.5 | 3.9   | 32.6     | 30.1 | 4.2   |
| Hip Fracture.....                          | 58              | 10.3                | 7.2  | 5.8   | 19.0    | 12.6 | 8.9   | 19.0     | 16.0 | 9.2   |
| Sepsis.....                                | 58              | 25.9                | 32.5 | 6.8   | 31.0    | 43.2 | 7.7   | 37.9     | 48.6 | 7.8   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 52              | 5.8                 | 4.1  | 3.1   | 5.8     | 5.1  | 3.2   | 5.8      | 6.0  | 3.5   |
| Coronary Artery Bypass Graft.....          | 75              | 6.7                 | 6.6  | 3.5   | 10.7    | 9.1  | 3.7   | 12.0     | 10.0 | 3.9   |
| Initial Pacemaker Insertion.....           | 27              | 3.7                 | 3.3  | ----- | 3.7     | 6.3  | ----- | 7.4      | 9.0  | ----- |
| Carotid Endarterectomy.....                | 20              | 0.0                 | 1.6  | ----- | 0.0     | 3.1  | ----- | 0.0      | 4.6  | ----- |
| Hip Replacement/Reconstruction.....        | 50              | 4.0                 | 2.2  | ----- | 10.0    | 4.1  | ----- | 10.0     | 5.6  | ----- |
| Open Reduction of Hip Fracture.....        | 32              | 15.6                | 8.2  | ----- | 15.6    | 14.7 | ----- | 15.6     | 18.8 | ----- |
| Prostatectomy.....                         | 130             | 2.3                 | 1.1  | 1.4   | 4.6     | 2.5  | 2.4   | 6.9      | 4.2  | 3.4   |
| Cholecystectomy.....                       | 49              | 0.0                 | 2.3  | ----- | 0.0     | 4.2  | ----- | 4.1      | 5.6  | ----- |
| Hysterectomy.....                          | 33              | 0.0                 | 0.5  | ----- | 0.0     | 1.2  | ----- | 0.0      | 2.0  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST JOSEPH MERCY HOSPITAL

Medicare Provider Number: 230029

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.6 years  
Proportion female..... 57.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 40.1 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 17.9 %  
Admitted for emergency..... 71.9 %

### COMORBIDITIES:

Cancer..... 7.0 %  
Chronic cardiovascular disease..... 38.1 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 2.1 %  
Chronic pulmonary disease..... 11.3 %  
Cerebrovascular degeneration..... 3.5 %  
Diabetes mellitus..... 6.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 87.8%  
State..... 9.3%  
Outside State..... 2.9%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 8.6 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 449  
Occupancy Rate..... 76.0 %  
Ownership/Control..... Church  
Medicare Discharges..... 30.0 %  
Case Mix Index (CMI)..... 1.4445

### STAFFING:

Total Number of Physicians..... 301  
Percent of Physicians Board  
Certified Specialists..... 84.4 %  
Medical Residents/Interns..... 106  
Registered Nurses..... 603  
Licensed Practical Nurses..... 46

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... Yes  
Organ/Tissue Transplant..... No  
Other Intensive Care..... Yes  
Trauma Center..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... Yes  
Rehabilitation..... Yes  
Psychiatric..... Yes  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST JOSEPH MERCY HOSPITAL

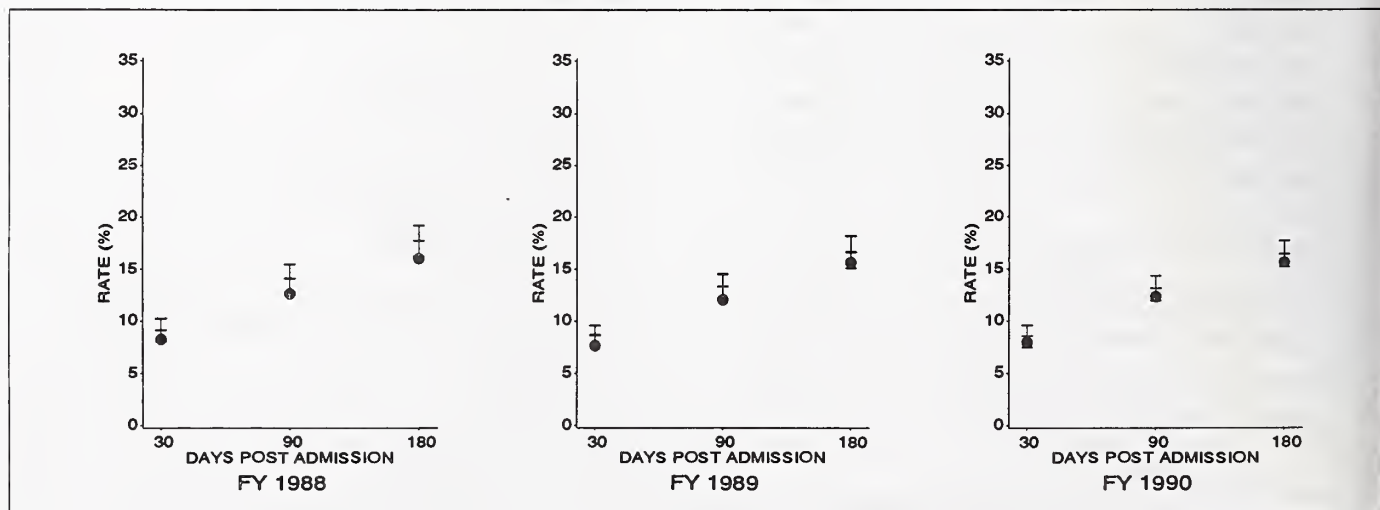
5301 E HURON RIVER DR  
ANN ARBOR, MI 48106  
Medicare Provider Number: 230156

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 5355            | 7.9                 | 8.5  | 0.5   | 12.3    | 13.1 | 0.6   | 15.6     | 16.4 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 174             | 17.8                | 23.5 | 4.6   | 20.7    | 26.8 | 5.0   | 23.6     | 29.6 | 5.6   |
| Congestive Heart Failure.....              | 226             | 15.5                | 14.8 | 4.0   | 24.8    | 23.5 | 3.2   | 31.0     | 29.8 | 3.3   |
| Pneumonia/Influenza.....                   | 113             | 16.8                | 15.2 | 3.7   | 20.4    | 21.0 | 3.9   | 25.7     | 25.0 | 4.1   |
| Chronic Obstructive Pulmonary Disease..... | 25              | 12.0                | 10.2 | ----- | 20.0    | 16.5 | ----- | 20.0     | 21.2 | ----- |
| Transient Cerebral Ischemia.....           | 69              | 0.0                 | 1.8  | 2.2   | 0.0     | 4.0  | 3.9   | 1.4      | 6.5  | 4.5   |
| Stroke.....                                | 179             | 17.3                | 20.4 | 4.4   | 21.8    | 27.7 | 4.9   | 25.1     | 31.7 | 5.4   |
| Hip Fracture.....                          | 124             | 5.6                 | 7.1  | 2.5   | 8.9     | 12.8 | 3.9   | 12.9     | 16.6 | 4.1   |
| Sepsis.....                                | 54              | 31.5                | 31.6 | 6.4   | 38.9    | 40.4 | 6.8   | 50.0     | 45.3 | 7.6   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 175             | 0.6                 | 2.3  | 2.0   | 1.1     | 3.2  | 2.3   | 2.3      | 4.2  | 2.2   |
| Coronary Artery Bypass Graft.....          | 198             | 8.1                 | 5.4  | 3.3   | 10.6    | 7.6  | 3.4   | 11.1     | 8.6  | 3.3   |
| Initial Pacemaker Insertion.....           | 59              | 5.1                 | 2.4  | 4.5   | 8.5     | 4.8  | 5.7   | 10.2     | 7.0  | 5.8   |
| Carotid Endarterectomy.....                | 36              | 0.0                 | 1.5  | ----- | 0.0     | 2.7  | ----- | 0.0      | 3.9  | ----- |
| Hip Replacement/Reconstruction.....        | 140             | 1.4                 | 2.1  | 1.3   | 1.4     | 3.9  | 2.4   | 3.6      | 5.3  | 2.2   |
| Open Reduction of Hip Fracture.....        | 73              | 4.1                 | 6.4  | 4.2   | 6.8     | 11.8 | 6.0   | 11.0     | 15.6 | 6.1   |
| Prostatectomy.....                         | 200             | 1.0                 | 0.6  | 0.6   | 1.0     | 1.5  | 1.6   | 2.5      | 2.7  | 2.0   |
| Cholecystectomy.....                       | 79              | 2.5                 | 2.5  | 1.9   | 3.8     | 4.3  | 2.8   | 3.8      | 5.6  | 3.4   |
| Hysterectomy.....                          | 65              | 1.5                 | 0.8  | 1.5   | 1.5     | 1.8  | 2.1   | 1.5      | 2.8  | 3.0   |

\* The Standard Deviation (SD) Is not calculated If the number of deaths or cases Is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST JOSEPH MERCY HOSPITAL

Medicare Provider Number: 230156

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.0 years  
Proportion female..... 53.4 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 47.9 %  
Transferred from skilled nursing facility..... 2.2 %  
Admitted for elective procedure..... 30.3 %  
Admitted for emergency..... 66.6 %

### COMORBIDITIES:

Cancer..... 9.4 %  
Chronic cardiovascular disease..... 39.2 %  
Chronic liver disease..... 0.8 %  
Chronic renal disease..... 4.0 %  
Chronic pulmonary disease..... 12.8 %  
Cerebrovascular degeneration..... 3.3 %  
Diabetes mellitus..... 9.1 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 42.2%  
State ..... 54.6%  
Outside State ..... 3.2%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.1 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 668  
Occupancy Rate ..... 77.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 31.7 %  
Case Mix Index (CMI) ..... 1.5773

### STAFFING:

Total Number of Physicians..... 476  
Percent of Physicians Board  
Certified Specialists .....(Not Available)  
Medical Residents/Interns ..... 109  
Registered Nurses.....1042  
Licensed Practical Nurses ..... 50

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... Yes  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... No  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST LAWRENCE HOSPITAL

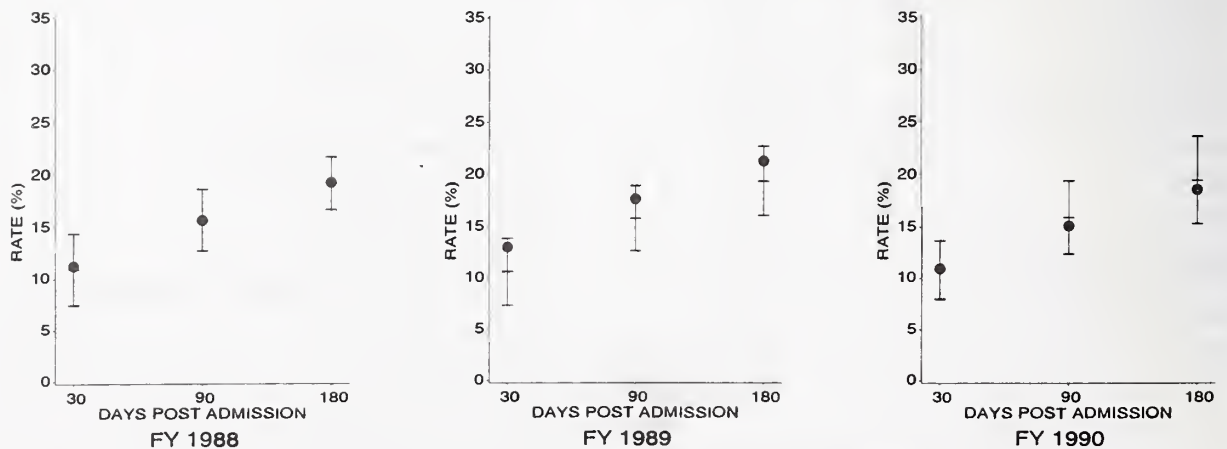
1210 W SAGINAW ST  
LANSING, MI 48914  
Medicare Provider Number: 230157

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1096               | 10.9                | 10.8 | 1.4  | 15.1    | 15.9 | 1.8  | 18.6     | 19.5 | 2.1  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 47                 | 29.8                | 29.7 | ---- | 31.9    | 32.5 | ---- | 31.9     | 35.3 | ---- |
| Congestive Heart Failure.....              | 52                 | 17.3                | 14.9 | 6.7  | 28.8    | 23.9 | 7.6  | 34.6     | 30.1 | 8.2  |
| Pneumonia/Influenza.....                   | 45                 | 13.3                | 16.9 | ---- | 17.8    | 23.2 | ---- | 20.0     | 26.9 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 8                  | 12.5                | 9.4  | ---- | 12.5    | 14.5 | ---- | 12.5     | 18.4 | ---- |
| Transient Cerebral Ischemia.....           | 7                  | 0.0                 | 1.7  | ---- | 28.6    | 4.0  | ---- | 28.6     | 6.8  | ---- |
| Stroke.....                                | 42                 | 23.8                | 25.0 | ---- | 26.2    | 32.7 | ---- | 33.3     | 36.8 | ---- |
| Hip Fracture.....                          | 25                 | 0.0                 | 6.7  | ---- | 0.0     | 11.5 | ---- | 4.0      | 15.0 | ---- |
| Sepsis.....                                | 22                 | 27.3                | 24.6 | ---- | 31.8    | 31.3 | ---- | 45.5     | 35.2 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 11                 | 9.1                 | 2.5  | ---- | 36.4    | 5.0  | ---- | 36.4     | 7.6  | ---- |
| Carotid Endarterectomy.....                | 5                  | 0.0                 | 1.2  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.4  | ---- |
| Hip Replacement/Reconstruction.....        | 14                 | 0.0                 | 4.0  | ---- | 0.0     | 7.5  | ---- | 7.1      | 10.3 | ---- |
| Open Reduction of Hip Fracture.....        | 12                 | 0.0                 | 6.4  | ---- | 0.0     | 11.2 | ---- | 0.0      | 14.5 | ---- |
| Prostatectomy.....                         | 50                 | 0.0                 | 0.7  | ---- | 0.0     | 1.7  | ---- | 0.0      | 3.0  | ---- |
| Cholecystectomy.....                       | 21                 | 9.5                 | 5.3  | ---- | 14.3    | 11.1 | ---- | 14.3     | 15.6 | ---- |
| Hysterectomy.....                          | 14                 | 0.0                 | 1.1  | ---- | 0.0     | 2.6  | ---- | 7.1      | 4.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST LAWRENCE HOSPITAL

Medicare Provider Number: 230157

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years

Proportion female..... 54.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 40.9 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 22.2 %

Admitted for emergency..... 57.4 %

### COMORBIDITIES:

Cancer..... 10.2 %

Chronic cardiovascular disease..... 33.8 %

Chronic liver disease..... 1.0 %

Chronic renal disease..... 2.9 %

Chronic pulmonary disease..... 9.1 %

Cerebrovascular degeneration..... 6.5 %

Diabetes mellitus..... 7.7 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 61.3%

State ..... 35.8%

Outside State ..... 2.9%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.6 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 515

Occupancy Rate ..... 67.0 %

Ownership/Control..... Church

Medicare Discharges ..... 26.6 %

Case Mix Index (CMI) ..... 1.3750

### STAFFING:

Total Number of Physicians..... 164

Percent of Physicians Board  
Certified Specialists ..... 91.5 %

Medical Residents/Interns ..... 18

Registered Nurses..... 168

Licensed Practical Nurses ..... 19

### SPECIALTY SERVICES:

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes

Rehabilitation..... No

Psychiatric ..... Yes

Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

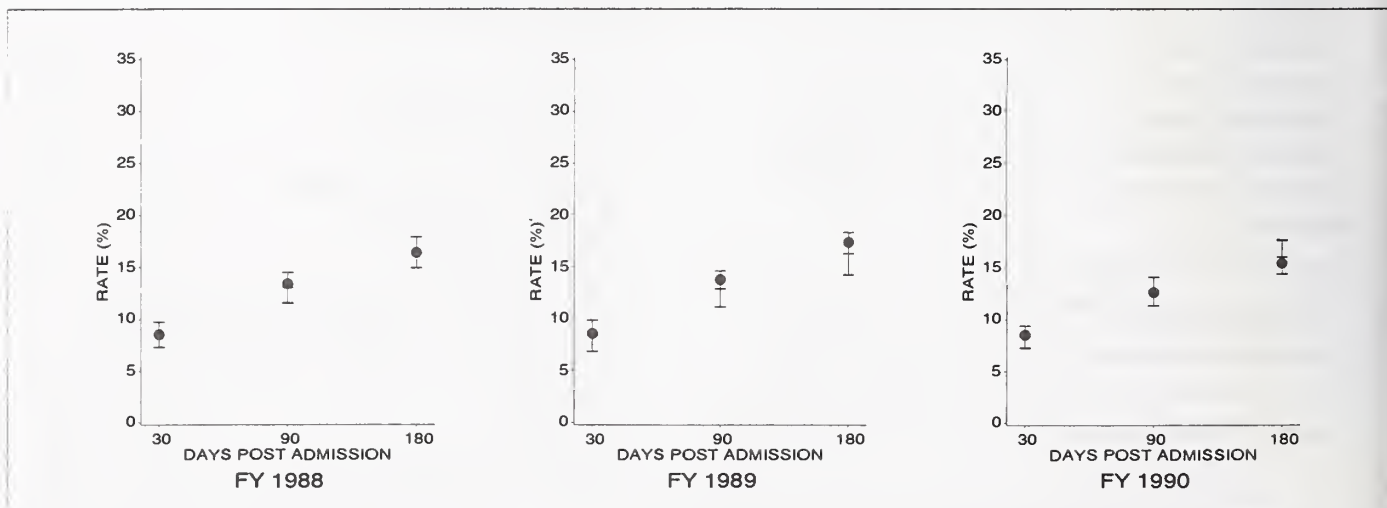
**ST LUKES HOSPITAL**  
705 COOPER  
SAGINAW, MI 48602  
Medicare Provider Number: 230070

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2867            | 8.5                 | 8.3  | 0.5  | 12.6    | 12.7 | 0.7  | 15.4     | 16.0 | 0.8  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 93              | 30.1                | 24.2 | 5.4  | 33.3    | 27.2 | 5.4  | 34.4     | 29.8 | 5.2  |
| Congestive Heart Failure.....              | 141             | 15.6                | 13.4 | 5.8  | 24.8    | 21.0 | 5.8  | 29.8     | 26.9 | 5.2  |
| Pneumonia/Influenza.....                   | 132             | 15.9                | 16.9 | 3.6  | 25.8    | 22.8 | 4.8  | 29.5     | 26.7 | 4.6  |
| Chronic Obstructive Pulmonary Disease..... | 40              | 12.5                | 9.3  | ---- | 17.5    | 16.3 | ---- | 22.5     | 21.4 | ---- |
| Transient Cerebral Ischemia.....           | 61              | 3.3                 | 2.6  | 2.2  | 6.6     | 5.5  | 3.8  | 8.2      | 8.5  | 5.2  |
| Stroke.....                                | 95              | 17.9                | 21.3 | 5.1  | 22.1    | 27.5 | 6.0  | 26.3     | 31.3 | 5.6  |
| Hip Fracture.....                          | 51              | 11.8                | 7.1  | 7.5  | 15.7    | 12.4 | 7.1  | 19.6     | 16.1 | 7.2  |
| Sepsis.....                                | 16              | 31.3                | 29.5 | ---- | 62.5    | 35.9 | ---- | 62.5     | 40.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 40              | 0.0                 | 2.7  | ---- | 0.0     | 5.6  | ---- | 0.0      | 8.5  | ---- |
| Carotid Endarterectomy.....                | 9               | 0.0                 | 2.5  | ---- | 0.0     | 4.7  | ---- | 0.0      | 6.6  | ---- |
| Hip Replacement/Reconstruction.....        | 69              | 2.9                 | 3.2  | 2.8  | 5.8     | 6.1  | 3.4  | 7.2      | 8.2  | 3.4  |
| Open Reduction of Hip Fracture.....        | 26              | 15.4                | 6.5  | ---- | 15.4    | 11.6 | ---- | 19.2     | 15.1 | ---- |
| Prostatectomy.....                         | 137             | 0.7                 | 0.9  | 0.9  | 2.2     | 2.2  | 1.3  | 4.4      | 3.8  | 1.7  |
| Cholecystectomy.....                       | 72              | 4.2                 | 2.4  | 2.9  | 4.2     | 4.6  | 2.5  | 8.3      | 6.4  | 3.4  |
| Hysterectomy.....                          | 4               | 0.0                 | 0.2  | ---- | 0.0     | 0.5  | ---- | 0.0      | 0.9  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm$  2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**ST LUKES HOSPITAL**  
Medicare Provider Number: 230070

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 74.4 years  
Proportion female..... 56.0 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 41.9 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 26.0 %  
Admitted for emergency..... 56.4 %

**COMORBIDITIES:**

Cancer..... 8.7 %  
Chronic cardiovascular disease..... 45.3 %  
Chronic liver disease..... 0.7 %  
Chronic renal disease..... 2.5 %  
Chronic pulmonary disease..... 15.8 %  
Cerebrovascular degeneration..... 3.3 %  
Diabetes mellitus..... 10.6 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 77.6%  
State ..... 20.5%  
Outside State ..... 1.9%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 7.3 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 310  
Occupancy Rate ..... 62.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 40.7 %  
Case Mix Index (CMI) ..... 1.2951

**STAFFING:**

Total Number of Physicians..... 159  
Percent of Physicians Board  
Certified Specialists ..... 88.1 %  
Medical Residents/Interns ..... 19  
Registered Nurses..... 240  
Licensed Practical Nurses ..... 103

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... Yes

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

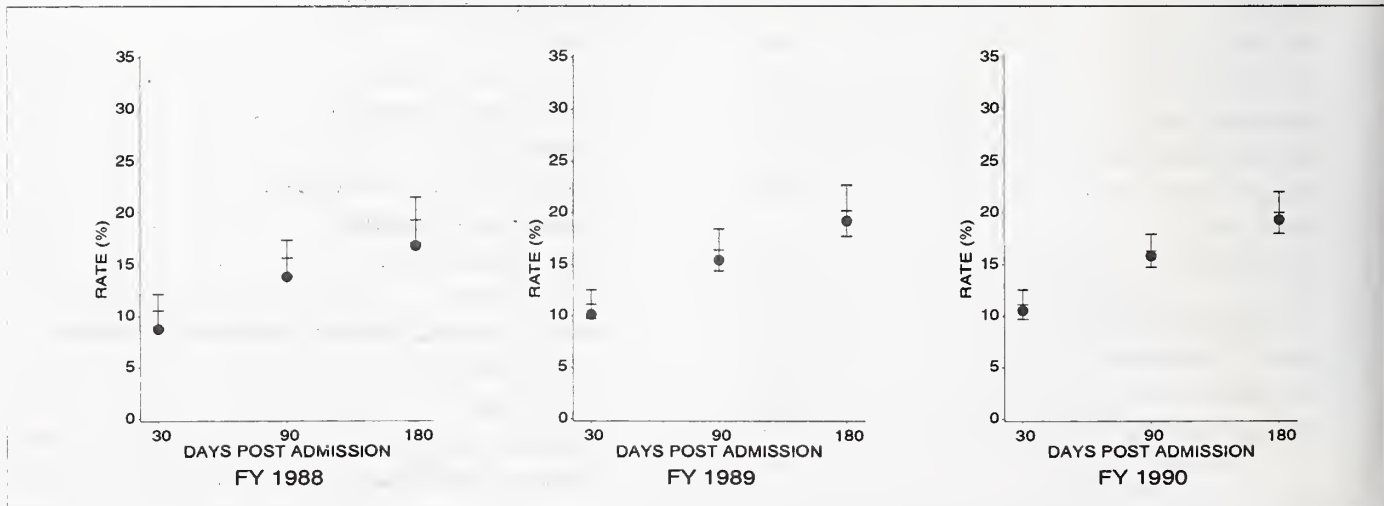
**ST MARY HOSPITAL**  
36475 FIVE MILE ROAD  
LIVONIA, MI 48154  
Medicare Provider Number: 230002

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3106            | 10.5                | 11.1 | 0.7  | 15.8    | 16.3 | 0.8  | 19.3     | 20.0 | 1.0  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 122             | 32.0                | 26.7 | 6.8  | 35.2    | 29.9 | 6.3  | 36.9     | 32.7 | 5.8  |
| Congestive Heart Failure.....              | 205             | 16.6                | 16.2 | 2.7  | 23.9    | 25.0 | 3.1  | 28.8     | 31.2 | 3.9  |
| Pneumonia/Influenza.....                   | 139             | 27.3                | 19.3 | 5.5  | 36.0    | 26.1 | 5.9  | 40.3     | 30.6 | 5.8  |
| Chronic Obstructive Pulmonary Disease..... | 44              | 4.5                 | 12.1 | ---- | 9.1     | 20.1 | ---- | 15.9     | 25.5 | ---- |
| Transient Cerebral Ischemia.....           | 63              | 1.6                 | 1.5  | 2.6  | 7.9     | 3.8  | 4.2  | 9.5      | 6.6  | 4.0  |
| Stroke.....                                | 139             | 16.5                | 20.9 | 5.1  | 20.1    | 28.8 | 6.1  | 23.0     | 32.7 | 6.2  |
| Hip Fracture.....                          | 76              | 9.2                 | 7.9  | 3.3  | 17.1    | 13.6 | 4.9  | 18.4     | 17.3 | 4.6  |
| Sepsis.....                                | 37              | 16.2                | 24.6 | ---- | 27.0    | 35.7 | ---- | 43.2     | 42.0 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 24              | 4.2                 | 3.1  | ---- | 8.3     | 6.1  | ---- | 8.3      | 9.0  | ---- |
| Carotid Endarterectomy.....                | 17              | 0.0                 | 1.3  | ---- | 0.0     | 2.3  | ---- | 0.0      | 3.4  | ---- |
| Hip Replacement/Reconstruction.....        | 42              | 9.5                 | 5.2  | ---- | 14.3    | 9.4  | ---- | 16.7     | 12.4 | ---- |
| Open Reduction of Hip Fracture.....        | 51              | 3.9                 | 6.5  | 5.3  | 11.8    | 11.6 | 7.3  | 13.7     | 15.1 | 7.0  |
| Prostatectomy.....                         | 165             | 1.2                 | 0.8  | 1.3  | 1.8     | 1.7  | 2.2  | 4.2      | 2.9  | 2.2  |
| Cholecystectomy.....                       | 77              | 2.6                 | 1.9  | 2.0  | 3.9     | 3.3  | 2.6  | 5.2      | 4.3  | 3.2  |
| Hysterectomy.....                          | 23              | 0.0                 | 0.1  | ---- | 0.0     | 0.4  | ---- | 0.0      | 0.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$  SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**



**ST MARY HOSPITAL**  
Medicare Provider Number: 230002

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| <b>DEMOGRAPHICS:</b>                           |            | <b>COMORBIDITIES:</b>               |        |
| Average age at admission.....                  | 75.9 years | Cancer.....                         | 7.5 %  |
| Proportion female.....                         | 58.4 %     | Chronic cardiovascular disease..... | 47.2 % |
| <b>ADMISSION SOURCES/TYPES:</b>                |            | Chronic liver disease.....          | 0.8 %  |
| Referred by personal or HMO physician.....     | 31.4 %     | Chronic renal disease.....          | 4.2 %  |
| Transferred from skilled nursing facility..... | 0.0 %      | Chronic pulmonary disease.....      | 15.0 % |
| Admitted for elective procedure.....           | 15.5 %     | Cerebrovascular degeneration.....   | 3.1 %  |
| Admitted for emergency.....                    | 65.3 %     | Diabetes mellitus.....              | 7.8 %  |

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

|                                              |        |                                         |          |
|----------------------------------------------|--------|-----------------------------------------|----------|
| <b>ORIGIN OF MEDICARE PATIENT ADMISSION:</b> |        | <b>MEDICARE AVERAGE LENGTH OF STAY:</b> |          |
| County/City .....                            | 85.9%  | Hospital .....                          | 8.2 Days |
| State .....                                  | 12.3%  | State .....                             | 8.5 Days |
| Outside State .....                          | 1.8%   | National .....                          | 8.6 Days |
| Total .....                                  | 100.0% |                                         |          |

**HOSPITAL CHARACTERISTICS\***

|                                                                    |        |                                                 |     |
|--------------------------------------------------------------------|--------|-------------------------------------------------|-----|
| <b>SOURCE: AHA Annual Survey of Hospitals** - Survey Year 1990</b> |        |                                                 |     |
| <b>PROFILE:</b>                                                    |        | <b>SPECIALTY SERVICES:</b>                      |     |
| Total Beds .....                                                   | 247    | Burn Unit .....                                 | No  |
| Occupancy Rate .....                                               | 82.0 % | Cardiac Intensive Care .....                    | Yes |
| Ownership/Control.....                                             | Church | Comprehensive Geriatric .....                   | No  |
| Medicare Discharges .....                                          | 47.2 % | Hospice Care .....                              | No  |
| Case Mix Index (CMI) .....                                         | 1.2198 | Medical/Surgical Intensive Care.....            | Yes |
| <b>STAFFING:</b>                                                   |        | Organ/Tissue Transplant .....                   | No  |
| Total Number of Physicians.....                                    | 263    | Other Intensive Care .....                      | No  |
| Percent of Physicians Board<br>Certified Specialists .....         | 63.9 % | Trauma Center .....                             | Yes |
| Medical Residents/Interns .....                                    | 0      | <b>OTHER SPECIALTY/HOSPITAL-BASED SERVICES:</b> |     |
| Registered Nurses.....                                             | 279    | Alcohol/Drug .....                              | Yes |
| Licensed Practical Nurses .....                                    | 47     | Rehabilitation.....                             | No  |
|                                                                    |        | Psychiatric .....                               | Yes |
|                                                                    |        | Medicare Swing Beds .....                       | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST MARYS HEALTH SERVICES

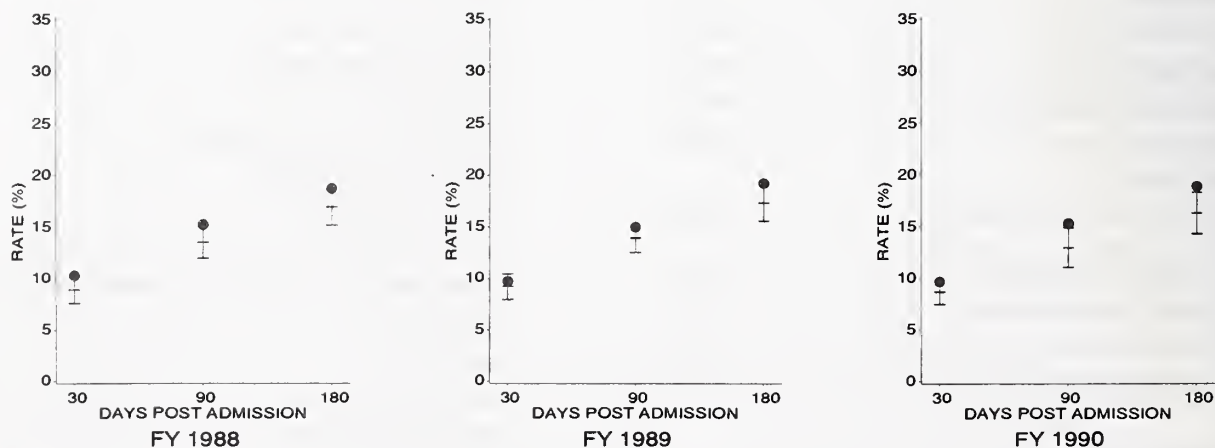
200 JEFFERSON ST SE  
GRAND RAPIDS, MI 49503  
Medicare Provider Number: 230059

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 3030            | 9.7                 | 8.7  | 0.6   | 15.3    | 13.0 | 1.0   | 18.9     | 16.3 | 1.0   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 69              | 20.3                | 27.2 | 9.5   | 27.5    | 30.0 | 10.4  | 30.4     | 32.5 | 9.1   |
| Congestive Heart Failure.....              | 129             | 18.6                | 14.8 | 4.1   | 22.5    | 23.2 | 4.1   | 30.2     | 29.3 | 4.1   |
| Pneumonia/Influenza.....                   | 139             | 18.7                | 15.6 | 5.6   | 25.9    | 20.8 | 7.4   | 29.5     | 24.5 | 6.8   |
| Chronic Obstructive Pulmonary Disease..... | 43              | 23.3                | 10.0 | ----- | 44.2    | 16.6 | ----- | 46.5     | 20.9 | ----- |
| Transient Cerebral Ischemia.....           | 23              | 4.3                 | 1.4  | ----- | 4.3     | 3.3  | ----- | 13.0     | 5.6  | ----- |
| Stroke.....                                | 107             | 24.3                | 21.9 | 4.2   | 29.9    | 27.7 | 6.3   | 40.2     | 31.1 | 6.7   |
| Hip Fracture.....                          | 139             | 7.9                 | 7.6  | 2.3   | 12.2    | 13.0 | 2.9   | 15.8     | 16.6 | 3.9   |
| Sepsis.....                                | 20              | 10.0                | 25.7 | ----- | 15.0    | 30.9 | ----- | 15.0     | 34.8 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 28              | 0.0                 | 4.0  | ----- | 3.6     | 7.4  | ----- | 7.1      | 10.5 | ----- |
| Carotid Endarterectomy.....                | 13              | 0.0                 | 1.7  | ----- | 0.0     | 3.1  | ----- | 7.7      | 4.6  | ----- |
| Hip Replacement/Reconstruction.....        | 109             | 5.5                 | 3.3  | 2.5   | 8.3     | 6.0  | 3.7   | 11.0     | 8.0  | 3.7   |
| Open Reduction of Hip Fracture.....        | 84              | 4.8                 | 6.8  | 3.7   | 7.1     | 11.9 | 6.1   | 10.7     | 15.5 | 7.7   |
| Prostatectomy.....                         | 205             | 1.5                 | 0.7  | 0.9   | 1.5     | 1.6  | 1.3   | 3.4      | 2.9  | 2.0   |
| Cholecystectomy.....                       | 76              | 2.6                 | 2.2  | 3.4   | 10.5    | 4.4  | 4.3   | 11.8     | 6.3  | 4.7   |
| Hysterectomy.....                          | 22              | 0.0                 | 0.3  | ----- | 0.0     | 0.8  | ----- | 0.0      | 1.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# ST MARYS HEALTH SERVICES

Medicare Provider Number: 230059

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.3 years  
Proportion female..... 53.5 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 49.5 %  
Transferred from skilled nursing facility..... 0.4 %  
Admitted for elective procedure..... 27.1 %  
Admitted for emergency..... 48.0 %

### COMORBIDITIES:

Cancer..... 7.2 %  
Chronic cardiovascular disease..... 40.0 %  
Chronic liver disease..... 0.9 %  
Chronic renal disease..... 6.9 %  
Chronic pulmonary disease..... 14.4 %  
Cerebrovascular degeneration..... 4.0 %  
Diabetes mellitus..... 8.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.1 %  
State ..... 21.5 %  
Outside State ..... 1.4 %  
Total ..... 100.0 %

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 8.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 319  
Occupancy Rate ..... 64.0 %  
Ownership/Control..... Church  
Medicare Discharges ..... 33.5 %  
Case Mix Index (CMI) ..... 1.4186

### STAFFING:

Total Number of Physicians..... 285  
Percent of Physicians Board  
Certified Specialists ..... 81.8 %  
Medical Residents/Interns ..... 37  
Registered Nurses..... 432  
Licensed Practical Nurses ..... 54

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... Yes  
Other Intensive Care ..... Yes  
Trauma Center ..... Yes

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ST MARYS MEDICAL CENTER

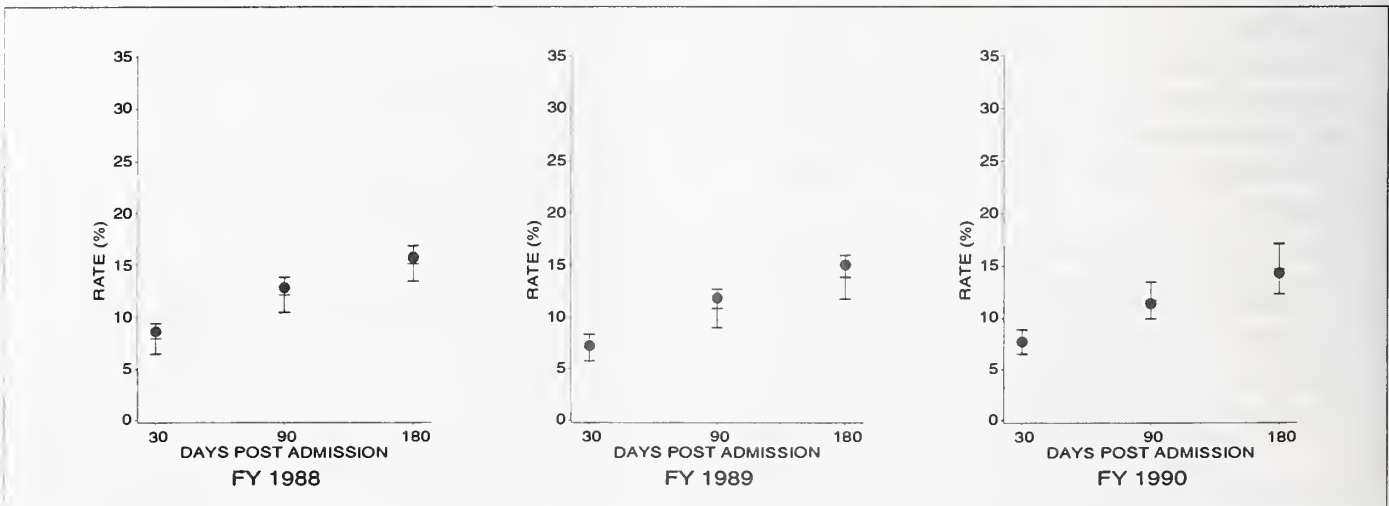
830 S JEFFERSON  
SAGINAW, MI 48601  
Medicare Provider Number: 230077

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2396            | 7.7                 | 7.7  | 0.6  | 11.4    | 11.7 | 0.9  | 14.3     | 14.7 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 90              | 14.4                | 22.4 | 5.5  | 16.7    | 25.2 | 5.7  | 17.8     | 27.7 | 6.2  |
| Congestive Heart Failure.....              | 79              | 15.2                | 12.7 | 4.1  | 15.2    | 20.0 | 5.2  | 19.0     | 25.5 | 6.0  |
| Pneumonia/Influenza.....                   | 57              | 14.0                | 16.1 | 5.1  | 19.3    | 21.5 | 5.8  | 24.6     | 25.5 | 6.0  |
| Chronic Obstructive Pulmonary Disease..... | 27              | 11.1                | 7.5  | ---- | 18.5    | 13.4 | ---- | 22.2     | 17.9 | ---- |
| Transient Cerebral Ischemia.....           | 69              | 5.8                 | 2.0  | 3.1  | 8.7     | 4.0  | 3.6  | 8.7      | 6.1  | 3.5  |
| Stroke.....                                | 77              | 13.0                | 22.2 | 5.8  | 24.7    | 28.7 | 6.6  | 28.6     | 32.4 | 5.6  |
| Hip Fracture.....                          | 20              | 0.0                 | 4.7  | ---- | 5.0     | 8.5  | ---- | 15.0     | 11.0 | ---- |
| Sepsis.....                                | 18              | 33.3                | 22.6 | ---- | 33.3    | 31.4 | ---- | 38.9     | 36.5 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 179             | 0.6                 | 2.2  | 1.4  | 1.7     | 2.9  | 1.4  | 4.5      | 3.7  | 1.7  |
| Coronary Artery Bypass Graft.....          | 285             | 4.2                 | 6.0  | 1.8  | 7.0     | 8.6  | 1.9  | 7.7      | 9.7  | 1.9  |
| Initial Pacemaker Insertion.....           | 29              | 10.3                | 2.9  | ---- | 10.3    | 6.0  | ---- | 13.8     | 8.9  | ---- |
| Carotid Endarterectomy.....                | 73              | 0.0                 | 1.6  | 2.1  | 0.0     | 2.9  | 3.4  | 1.4      | 4.2  | 3.6  |
| Hip Replacement/Reconstruction.....        | 33              | 0.0                 | 2.0  | ---- | 3.0     | 3.8  | ---- | 9.1      | 5.0  | ---- |
| Open Reduction of Hip Fracture.....        | 7               | 0.0                 | 4.3  | ---- | 0.0     | 7.8  | ---- | 0.0      | 10.5 | ---- |
| Prostatectomy.....                         | 54              | 0.0                 | 0.7  | 1.3  | 0.0     | 1.6  | 2.1  | 0.0      | 2.8  | 3.1  |
| Cholecystectomy.....                       | 29              | 0.0                 | 2.7  | ---- | 0.0     | 4.5  | ---- | 0.0      | 5.6  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ST MARYS MEDICAL CENTER

Medicare Provider Number: 230077

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 72.5 years |
| Proportion female.....        | 46.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 50.0 % |
| Transferred from skilled nursing facility..... | 0.2 %  |
| Admitted for elective procedure.....           | 32.1 % |
| Admitted for emergency.....                    | 43.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.8 %  |
| Chronic cardiovascular disease..... | 47.0 % |
| Chronic liver disease.....          | 0.7 %  |
| Chronic renal disease.....          | 2.2 %  |
| Chronic pulmonary disease.....      | 12.5 % |
| Cerebrovascular degeneration.....   | 1.5 %  |
| Diabetes mellitus.....              | 11.5 % |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 50.5%  |
| State .....         | 47.6%  |
| Outside State ..... | 1.9%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 9.4 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |        |
|----------------------------|--------|
| Total Beds .....           | 261    |
| Occupancy Rate .....       | 75.0 % |
| Ownership/Control.....     | Church |
| Medicare Discharges .....  | 40.4 % |
| Case Mix Index (CMI) ..... | 2.0109 |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 102    |
| Percent of Physicians Board<br>Certified Specialists ..... | 79.4 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 294    |
| Licensed Practical Nurses .....                            | 69     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | Yes |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | Yes |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# STANDISH COMMUNITY HOSPITAL

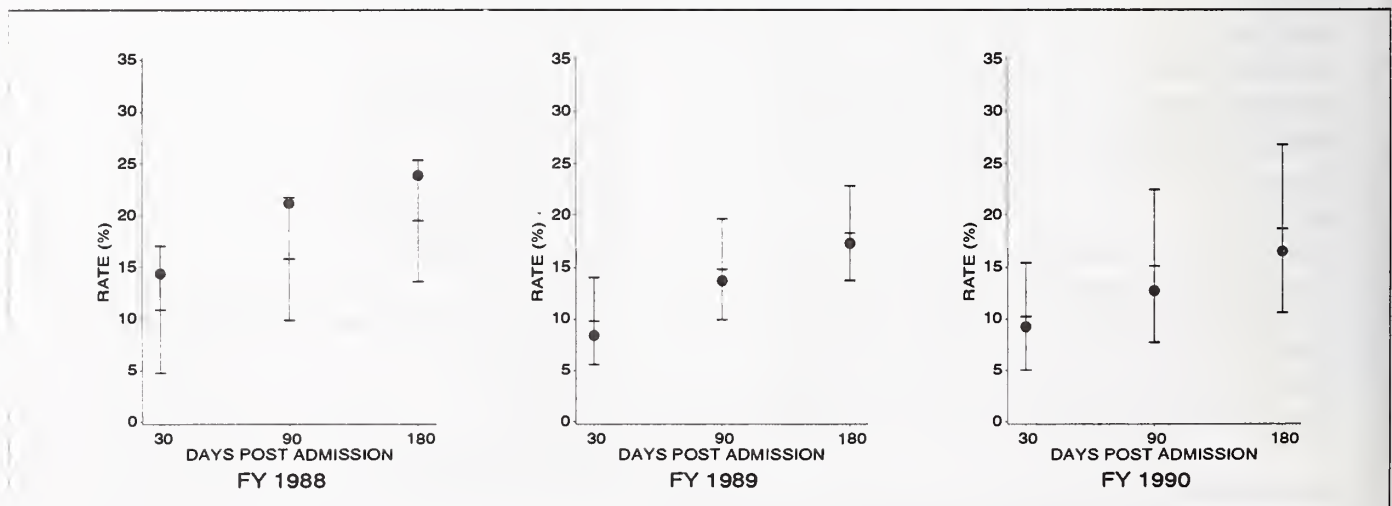
BOX 579 805 W CEDAR STREET  
STANDISH, MI 48658  
Medicare Provider Number: 230205

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 346             | 9.2                 | 10.2 | 2.6   | 12.7    | 15.1 | 3.7   | 16.5     | 18.7 | 4.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 11              | 27.3                | 18.6 | ----- | 27.3    | 22.8 | ----- | 27.3     | 26.4 | ----- |
| Congestive Heart Failure.....              | 23              | 4.3                 | 12.9 | ----- | 8.7     | 19.5 | ----- | 17.4     | 25.0 | ----- |
| Pneumonia/Influenza.....                   | 34              | 11.8                | 17.5 | ----- | 17.6    | 24.2 | ----- | 26.5     | 28.6 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 0.0                 | 13.2 | ----- | 0.0     | 20.5 | ----- | 0.0      | 25.7 | ----- |
| Transient Cerebral Ischemia.....           | 6               | 0.0                 | 1.5  | ----- | 0.0     | 3.3  | ----- | 0.0      | 5.3  | ----- |
| Stroke.....                                | 9               | 33.3                | 19.8 | ----- | 33.3    | 27.0 | ----- | 33.3     | 30.8 | ----- |
| Hip Fracture.....                          | 2               | 0.0                 | 5.3  | ----- | 50.0    | 10.2 | ----- | 50.0     | 13.1 | ----- |
| Sepsis.....                                | 8               | 37.5                | 32.4 | ----- | 50.0    | 39.2 | ----- | 50.0     | 43.7 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 2.5  | ----- | 0.0     | 4.8  | ----- | 0.0      | 7.3  | ----- |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 1               | 0.0                 | 2.2  | ----- | 0.0     | 4.8  | ----- | 0.0      | 6.9  | ----- |
| Open Reduction of Hip Fracture.....        | 1               | 0.0                 | 6.2  | ----- | 0.0     | 10.9 | ----- | 0.0      | 13.2 | ----- |
| Prostatectomy.....                         | 5               | 0.0                 | 0.6  | ----- | 0.0     | 1.4  | ----- | 0.0      | 2.5  | ----- |
| Cholecystectomy.....                       | 6               | 0.0                 | 1.1  | ----- | 0.0     | 2.1  | ----- | 0.0      | 2.8  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 1.2  | ----- | 0.0     | 2.6  | ----- | 0.0      | 4.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# STANDISH COMMUNITY HOSPITAL

Medicare Provider Number: 230205

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 75.2 years  
Proportion female..... 54.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 39.0 %  
Transferred from skilled nursing facility..... 2.6 %  
Admitted for elective procedure..... 1.2 %  
Admitted for emergency..... 40.2 %

### COMORBIDITIES:

Cancer..... 6.1 %  
Chronic cardiovascular disease..... 58.1 %  
Chronic liver disease..... 1.4 %  
Chronic renal disease..... 1.4 %  
Chronic pulmonary disease..... 18.5 %  
Cerebrovascular degeneration..... 2.6 %  
Diabetes mellitus..... 9.5 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 58.6%  
State..... 39.8%  
Outside State..... 1.6%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 5.7 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 81  
Occupancy Rate..... 65.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges..... 61.2 %  
Case Mix Index (CMI)..... 1.0494

### STAFFING:

Total Number of Physicians..... 13  
Percent of Physicians Board  
Certified Specialists..... 100.0 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 19  
Licensed Practical Nurses..... 25

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... Yes  
Hospice Care..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# STRAITH MEMORIAL HOSPITAL

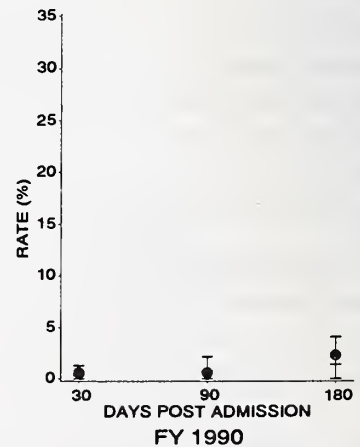
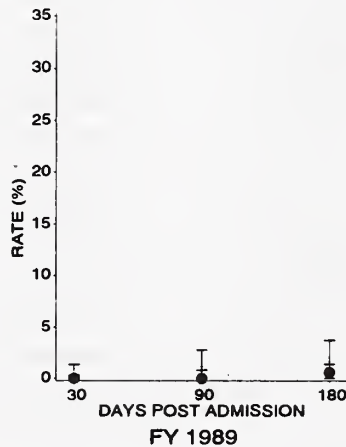
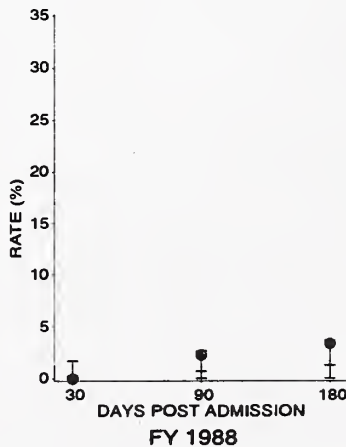
23901 LAHSER  
SOUTHFIELD, MI 48075  
Medicare Provider Number: 230071

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 177                | 0.6                 | 0.3  | 0.5 | 0.6     | 0.8  | 0.7 | 2.3      | 1.4  | 1.3 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Congestive Heart Failure.....              | 0                  |                     |      |     |         |      |     |          |      |     |
| Pneumonia/Influenza.....                   | 0                  |                     |      |     |         |      |     |          |      |     |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |     |         |      |     |          |      |     |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Stroke.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Fracture.....                          | 0                  |                     |      |     |         |      |     |          |      |     |
| Sepsis.....                                | 0                  |                     |      |     |         |      |     |          |      |     |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 0                  |                     |      |     |         |      |     |          |      |     |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |     |         |      |     |          |      |     |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |     |         |      |     |          |      |     |
| Carotid Endarterectomy.....                | 0                  |                     |      |     |         |      |     |          |      |     |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |     |         |      |     |          |      |     |
| Prostatectomy.....                         | 0                  |                     |      |     |         |      |     |          |      |     |
| Cholecystectomy.....                       | 0                  |                     |      |     |         |      |     |          |      |     |
| Hysterectomy.....                          | 0                  |                     |      |     |         |      |     |          |      |     |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# STRAITH MEMORIAL HOSPITAL

Medicare Provider Number: 230071

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.2 years

Proportion female..... 53.7 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 99.4 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 99.4 %

Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 1.1 %

Chronic cardiovascular disease..... 3.4 %

Chronic liver disease..... 0.0 %

Chronic renal disease..... 0.0 %

Chronic pulmonary disease..... 2.3 %

Cerebrovascular degeneration..... 0.0 %

Diabetes mellitus..... 3.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 25.4%

State ..... 71.2%

Outside State ..... 3.4%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 1.6 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 34

Ownership/Control..... Private, Non-Profit

Case Mix Index (CMI) ..... 0.6868

### STAFFING:

Medical Residents/Interns ..... 3

Registered Nurses..... 30

Licensed Practical Nurses ..... 0

### SPECIALTY SERVICES:

Burn Unit ..... No

Coronary Care Unit ..... No

Hospice Care ..... No

Intensive Care Unit ..... No

Organ Transplant ..... Yes

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No

Rehabilitation..... No

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

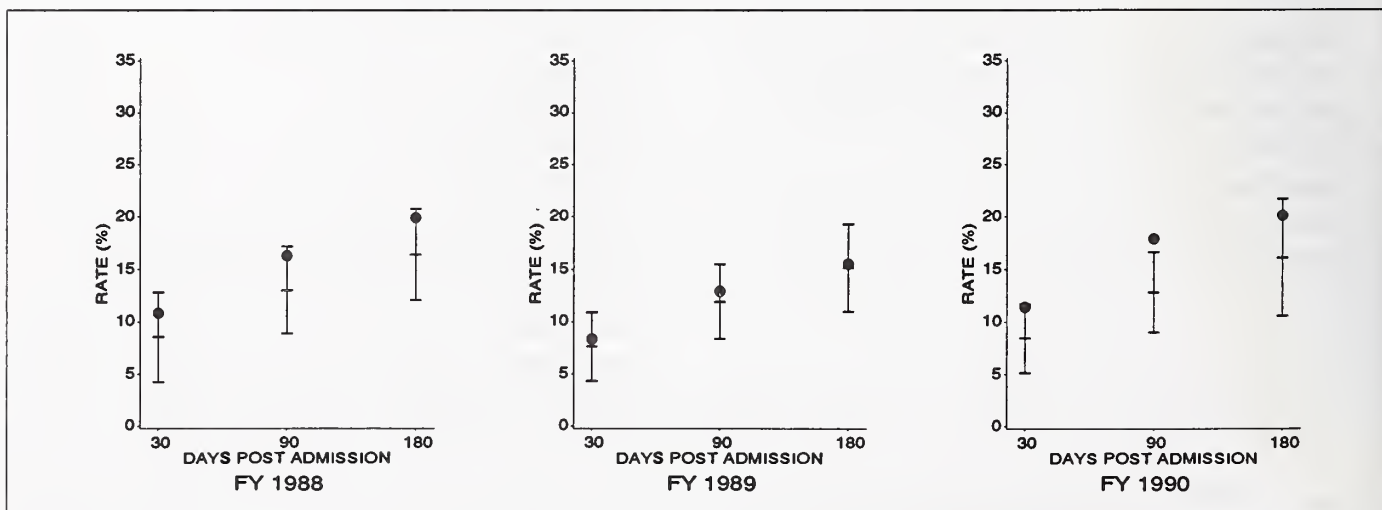
**STURGIS HOSPITAL**  
916 MYRTLE AVE  
STURGIS, MI 49091  
Medicare Provider Number: 230096

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 507                | 11.4                | 8.4  | 1.7  | 17.9    | 12.8 | 1.9  | 20.1     | 16.1 | 2.8  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 12                 | 25.0                | 22.6 | ---- | 33.3    | 25.1 | ---- | 33.3     | 27.7 | ---- |
| Congestive Heart Failure.....              | 29                 | 10.3                | 13.4 | ---- | 17.2    | 20.9 | ---- | 17.2     | 27.1 | ---- |
| Pneumonia/Influenza.....                   | 44                 | 11.4                | 11.8 | ---- | 22.7    | 16.4 | ---- | 25.0     | 19.5 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7                  | 0.0                 | 4.7  | ---- | 0.0     | 8.0  | ---- | 0.0      | 10.8 | ---- |
| Transient Cerebral Ischemia.....           | 6                  | 0.0                 | 1.5  | ---- | 0.0     | 3.5  | ---- | 0.0      | 6.0  | ---- |
| Stroke.....                                | 16                 | 25.0                | 14.4 | ---- | 43.8    | 20.4 | ---- | 43.8     | 24.3 | ---- |
| Hip Fracture.....                          | 15                 | 20.0                | 6.1  | ---- | 20.0    | 11.1 | ---- | 20.0     | 14.5 | ---- |
| Sepsis.....                                | 6                  | 0.0                 | 17.3 | ---- | 0.0     | 23.2 | ---- | 16.7     | 26.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 4                  | 25.0                | 8.1  | ---- | 25.0    | 14.9 | ---- | 25.0     | 19.3 | ---- |
| Open Reduction of Hip Fracture.....        | 2                  | 0.0                 | 3.3  | ---- | 0.0     | 6.4  | ---- | 0.0      | 8.6  | ---- |
| Prostatectomy.....                         | 23                 | 0.0                 | 0.6  | ---- | 4.3     | 1.6  | ---- | 4.3      | 2.8  | ---- |
| Cholecystectomy.....                       | 21                 | 0.0                 | 1.4  | ---- | 0.0     | 2.7  | ---- | 0.0      | 3.8  | ---- |
| Hysterectomy.....                          | 2                  | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.3  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**





**STURGIS HOSPITAL**  
Medicare Provider Number: 230096

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 76.1 years  
Proportion female..... 59.4 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 38.8 %  
Transferred from skilled nursing facility..... 0.6 %  
Admitted for elective procedure..... 12.2 %  
Admitted for emergency..... 1.6 %

**COMORBIDITIES:**

Cancer..... 6.5 %  
Chronic cardiovascular disease..... 29.3 %  
Chronic liver disease..... 0.4 %  
Chronic renal disease..... 3.0 %  
Chronic pulmonary disease..... 17.3 %  
Cerebrovascular degeneration..... 2.2 %  
Diabetes mellitus..... 10.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 84.2%  
State ..... 11.2%  
Outside State ..... 4.6%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 5.5 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 57  
Occupancy Rate ..... 42.0 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 32.5 %  
Case Mix Index (CMI) ..... 1.0786

**STAFFING:**

Total Number of Physicians..... 23  
Percent of Physicians Board  
Certified Specialists..... 82.6 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 43  
Licensed Practical Nurses ..... 13

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# TAWAS ST JOSEPH HOSPITAL

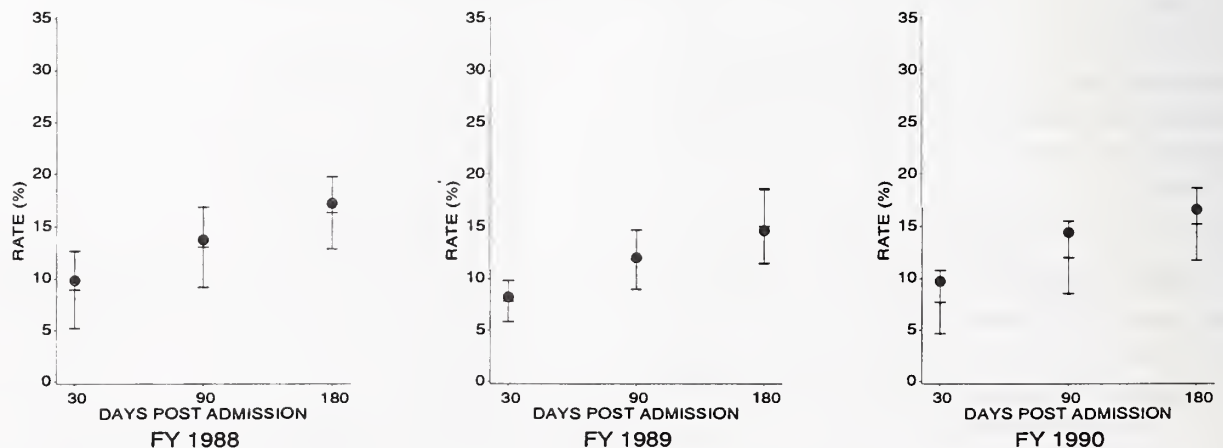
200 HEMLOCK  
TAWAS CITY, MI 48763  
Medicare Provider Number: 230100

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 812                | 9.7                 | 7.7  | 1.5  | 14.4    | 12.0 | 1.7  | 16.6     | 15.2 | 1.7  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 27                 | 29.6                | 23.1 | ---- | 33.3    | 26.0 | ---- | 33.3     | 28.4 | ---- |
| Congestive Heart Failure.....              | 48                 | 10.4                | 14.9 | ---- | 16.7    | 23.7 | ---- | 20.8     | 29.8 | ---- |
| Pneumonia/Influenza.....                   | 57                 | 14.0                | 16.1 | 5.3  | 22.8    | 22.1 | 7.5  | 26.3     | 26.1 | 6.0  |
| Chronic Obstructive Pulmonary Disease..... | 17                 | 11.8                | 6.8  | ---- | 17.6    | 12.2 | ---- | 23.5     | 17.1 | ---- |
| Transient Cerebral Ischemia.....           | 6                  | 0.0                 | 1.0  | ---- | 16.7    | 2.5  | ---- | 16.7     | 4.2  | ---- |
| Stroke.....                                | 17                 | 41.2                | 20.5 | ---- | 52.9    | 28.2 | ---- | 52.9     | 32.1 | ---- |
| Hip Fracture.....                          | 18                 | 0.0                 | 7.9  | ---- | 0.0     | 13.6 | ---- | 0.0      | 16.8 | ---- |
| Sepsis.....                                | 7                  | 42.9                | 21.3 | ---- | 57.1    | 28.0 | ---- | 57.1     | 31.8 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 16                 | 0.0                 | 5.5  | ---- | 0.0     | 9.8  | ---- | 0.0      | 12.4 | ---- |
| Open Reduction of Hip Fracture.....        | 6                  | 0.0                 | 8.8  | ---- | 0.0     | 15.5 | ---- | 0.0      | 19.1 | ---- |
| Prostatectomy.....                         | 36                 | 0.0                 | 0.6  | ---- | 0.0     | 1.7  | ---- | 0.0      | 3.0  | ---- |
| Cholecystectomy.....                       | 19                 | 10.5                | 1.8  | ---- | 10.5    | 3.5  | ---- | 15.8     | 4.6  | ---- |
| Hysterectomy.....                          | 4                  | 0.0                 | 0.6  | ---- | 0.0     | 1.3  | ---- | 0.0      | 2.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# TAWAS ST JOSEPH HOSPITAL

Medicare Provider Number: 230100

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.5 years |
| Proportion female.....        | 52.6 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 33.3 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 37.3 % |
| Admitted for emergency.....                    | 30.8 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.3 %  |
| Chronic cardiovascular disease..... | 39.8 % |
| Chronic liver disease.....          | 0.5 %  |
| Chronic renal disease.....          | 1.1 %  |
| Chronic pulmonary disease.....      | 16.4 % |
| Cerebrovascular degeneration.....   | 2.1 %  |
| Diabetes mellitus.....              | 7.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 68.4%  |
| State .....         | 28.4%  |
| Outside State ..... | 3.2%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.2 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 69                  |
| Occupancy Rate .....       | 50.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 48.9 %              |
| Case Mix Index (CMI) ..... | 1.1363              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 25     |
| Percent of Physicians Board<br>Certified Specialists ..... | 56.0 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 62     |
| Licensed Practical Nurses .....                            | 21     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | No  |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

**THORN HOSPITAL**  
458 CROSS STREET  
HUDSON, MI 49247  
Medicare Provider Number: 230278

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1                  | 0.0                 | 2.7  | ----- | 0.0     | 5.4  | ----- | 0.0      | 8.6  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)



**THORN HOSPITAL**  
Medicare Provider Number: 230278

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 62.0 years  
Proportion female..... 100.0 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 100.0 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 100.0 %  
Admitted for emergency..... 0.0 %

**COMORBIDITIES:**

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 0.0 %  
Chronic liver disease..... 100.0 %  
Chronic renal disease..... 0.0 %  
Chronic pulmonary disease..... 100.0 %  
Cerebrovascular degeneration..... 0.0 %  
Diabetes mellitus..... 0.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 33.3%  
State ..... 66.7%  
Outside State ..... 0.0%  
Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 0.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 22  
Occupancy Rate ..... 14.8 %  
Ownership/Control..... Local Government  
Medicare Discharges ..... 5.7 %  
Case Mix Index (CMI) ..... 0.7969

**STAFFING:**

Total Number of Physicians..... 6  
Percent of Physicians Board  
Certified Specialists..... 50.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 19  
Licensed Practical Nurses..... 10

**SPECIALTY SERVICES:**

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# THREE RIVERS HOSPITAL

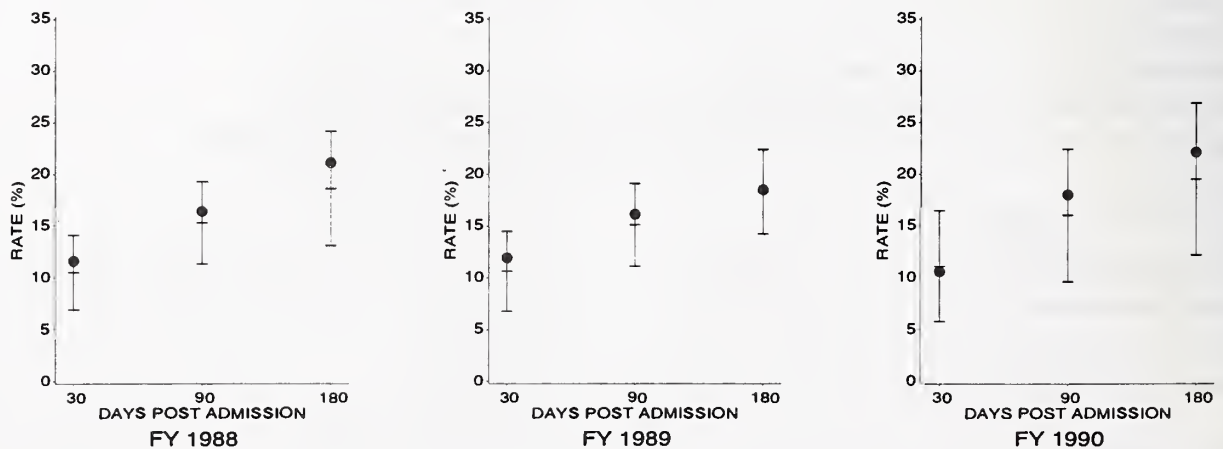
1111 WEST BROADWAY  
THREE RIVERS, MI 49093  
Medicare Provider Number: 230015

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 489             | 10.6                | 11.1 | 2.7   | 18.0    | 16.0 | 3.2   | 22.1     | 19.5 | 3.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 19              | 26.3                | 26.8 | ----- | 31.6    | 29.6 | ----- | 31.6     | 32.0 | ----- |
| Congestive Heart Failure.....              | 17              | 17.6                | 14.3 | ----- | 35.3    | 22.5 | ----- | 41.2     | 27.5 | ----- |
| Pneumonia/Influenza.....                   | 35              | 11.4                | 14.8 | ----- | 17.1    | 20.2 | ----- | 22.9     | 23.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 9               | 0.0                 | 7.7  | ----- | 11.1    | 14.7 | ----- | 22.2     | 19.4 | ----- |
| Transient Cerebral Ischemia.....           | 3               | 0.0                 | 2.1  | ----- | 0.0     | 4.6  | ----- | 0.0      | 7.3  | ----- |
| Stroke.....                                | 22              | 18.2                | 20.3 | ----- | 22.7    | 25.5 | ----- | 22.7     | 28.8 | ----- |
| Hip Fracture.....                          | 16              | 12.5                | 8.2  | ----- | 18.8    | 13.2 | ----- | 18.8     | 16.7 | ----- |
| Sepsis.....                                | 11              | 45.5                | 29.7 | ----- | 54.5    | 34.2 | ----- | 63.6     | 38.3 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 3               | 0.0                 | 8.2  | ----- | 0.0     | 13.0 | ----- | 0.0      | 15.9 | ----- |
| Open Reduction of Hip Fracture.....        | 13              | 15.4                | 8.1  | ----- | 23.1    | 13.3 | ----- | 23.1     | 16.9 | ----- |
| Prostatectomy.....                         | 14              | 0.0                 | 1.2  | ----- | 7.1     | 2.8  | ----- | 7.1      | 4.7  | ----- |
| Cholecystectomy.....                       | 13              | 7.7                 | 1.9  | ----- | 7.7     | 3.2  | ----- | 15.4     | 4.1  | ----- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.1  | ----- | 0.0     | 0.1  | ----- | 0.0      | 0.2  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# THREE RIVERS HOSPITAL

Medicare Provider Number: 230015

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.5 years |
| Proportion female.....        | 58.9 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 38.7 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 0.6 %  |
| Admitted for emergency.....                    | 63.2 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 5.5 %  |
| Chronic cardiovascular disease..... | 47.9 % |
| Chronic liver disease.....          | 1.6 %  |
| Chronic renal disease.....          | 1.6 %  |
| Chronic pulmonary disease.....      | 17.8 % |
| Cerebrovascular degeneration.....   | 4.7 %  |
| Diabetes mellitus.....              | 9.6 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 83.2%  |
| State .....         | 13.7%  |
| Outside State ..... | 3.1%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 6.0 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                    |
|----------------------------|--------------------|
| Total Beds .....           | 60                 |
| Occupancy Rate .....       | 36.0 %             |
| Ownership/Control.....     | District/Authority |
| Medicare Discharges .....  | 39.6 %             |
| Case Mix Index (CMI) ..... | 1.2854             |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 17     |
| Percent of Physicians Board<br>Certified Specialists ..... | 64.7 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 24     |
| Licensed Practical Nurses .....                            | 16     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation .....      | Yes |
| Psychiatric .....         | No  |
| Medicare Swing Beds ..... | Yes |

\*\* Except for CMI

\* Not used in calculating mortality rates

# TOLFREE MEMORIAL HOSPITAL

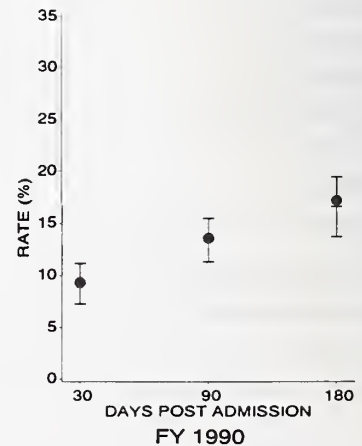
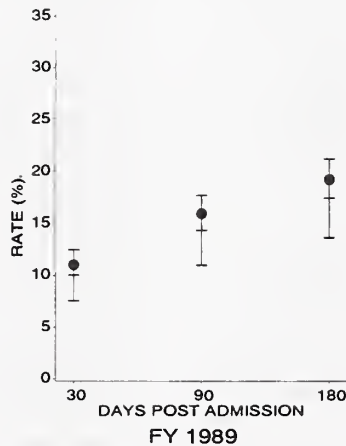
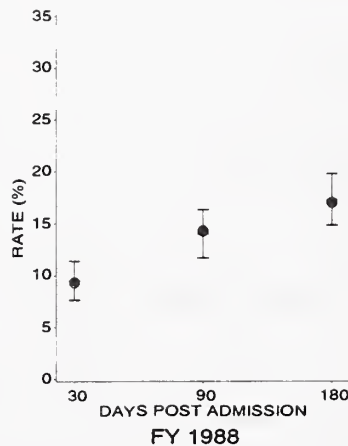
335 E HOUGHTON AVENUE  
WEST BRANCH, MI 48661  
Medicare Provider Number: 230095

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 1115            | 9.3                 | 9.2  | 1.0  | 13.6    | 13.4 | 1.0  | 17.2     | 16.6 | 1.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 67              | 19.4                | 24.2 | 6.4  | 29.9    | 27.1 | 7.8  | 31.3     | 29.9 | 5.9  |
| Congestive Heart Failure.....              | 66              | 18.2                | 14.7 | 5.0  | 24.2    | 23.2 | 6.0  | 33.3     | 29.4 | 6.6  |
| Pneumonia/Influenza.....                   | 56              | 25.0                | 18.4 | 9.0  | 33.9    | 25.3 | 10.2 | 35.7     | 29.6 | 9.3  |
| Chronic Obstructive Pulmonary Disease..... | 28              | 7.1                 | 5.1  | ---- | 10.7    | 9.3  | ---- | 17.9     | 12.8 | ---- |
| Transient Cerebral Ischemia.....           | 34              | 0.0                 | 1.7  | ---- | 5.9     | 3.9  | ---- | 5.9      | 6.5  | ---- |
| Stroke.....                                | 37              | 24.3                | 21.5 | ---- | 29.7    | 27.7 | ---- | 37.8     | 31.8 | ---- |
| Hip Fracture.....                          | 38              | 7.9                 | 6.5  | ---- | 13.2    | 11.1 | ---- | 21.1     | 14.5 | ---- |
| Sepsis.....                                | 9               | 0.0                 | 19.0 | ---- | 0.0     | 25.5 | ---- | 0.0      | 30.2 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 3               | 0.0                 | 1.1  | ---- | 0.0     | 2.0  | ---- | 33.3     | 3.2  | ---- |
| Hip Replacement/Reconstruction.....        | 24              | 0.0                 | 3.6  | ---- | 4.2     | 6.8  | ---- | 12.5     | 9.3  | ---- |
| Open Reduction of Hip Fracture.....        | 19              | 5.3                 | 5.2  | ---- | 10.5    | 9.4  | ---- | 15.8     | 12.5 | ---- |
| Prostatectomy.....                         | 19              | 0.0                 | 0.5  | ---- | 0.0     | 1.2  | ---- | 5.3      | 2.2  | ---- |
| Cholecystectomy.....                       | 13              | 7.7                 | 2.3  | ---- | 15.4    | 4.5  | ---- | 15.4     | 6.7  | ---- |
| Hysterectomy.....                          | 6               | 0.0                 | 0.1  | ---- | 0.0     | 0.1  | ---- | 0.0      | 0.2  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# TOLFREE MEMORIAL HOSPITAL

Medicare Provider Number: 230095

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.5 years  
Proportion female..... 54.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 27.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 8.2 %  
Admitted for emergency..... 78.9 %

### COMORBIDITIES:

Cancer..... 6.8 %  
Chronic cardiovascular disease..... 46.1 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 2.0 %  
Chronic pulmonary disease..... 18.0 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 9.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City..... 43.2%  
State..... 55.2%  
Outside State..... 1.6%  
Total..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital..... 6.1 Days  
State..... 8.5 Days  
National..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds..... 92  
Occupancy Rate..... 55.0 %  
Ownership/Control..... Local Government  
Medicare Discharges..... 44.2 %  
Case Mix Index (CMI)..... 1.0782

### STAFFING:

Total Number of Physicians..... 45  
Percent of Physicians Board  
Certified Specialists..... 17.8 %  
Medical Residents/Interns..... 0  
Registered Nurses..... 82  
Licensed Practical Nurses..... 40

### SPECIALTY SERVICES:

Burn Unit..... No  
Cardiac Intensive Care..... Yes  
Comprehensive Geriatric..... No  
Hospice Care..... Yes  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant..... No  
Other Intensive Care..... No  
Trauma Center..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No  
Rehabilitation..... No  
Psychiatric..... No  
Medicare Swing Beds..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# TRI COUNTY COMMUNITY HOSPITAL

1131 E HOWARD CITY  
EDMORE, MI 48829  
Medicare Provider Number: 230179

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 37                 | 13.5                | 6.1  | ---- | 16.2    | 9.8  | ---- | 29.7     | 12.9 | ---- |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 1                  | 0.0                 | 36.7 | ---- | 0.0     | 43.5 | ---- | 100.0    | 49.3 | ---- |
| Congestive Heart Failure.....              | 4                  | 25.0                | 17.6 | ---- | 50.0    | 28.7 | ---- | 100.0    | 35.9 | ---- |
| Pneumonia/Influenza.....                   | 1                  | 0.0                 | 6.9  | ---- | 0.0     | 8.7  | ---- | 0.0      | 10.9 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |      |         |      |      |          |      |      |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Fracture.....                          | 0                  |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1                  | 0.0                 | 15.8 | ---- | 0.0     | 19.7 | ---- | 0.0      | 24.9 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 0                  |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 0                  |                     |      |      |         |      |      |          |      |      |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES

No Graphs are presented when the standard deviation  
was not computed for one or more of the three fiscal years,  
(1988, 1989, or 1990)

# TRI COUNTY COMMUNITY HOSPITAL

Medicare Provider Number: 230179

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 65.1 years  
Proportion female..... 36.8 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 81.6 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 76.3 %  
Admitted for emergency..... 0.0 %

### COMORBIDITIES:

Cancer..... 0.0 %  
Chronic cardiovascular disease..... 34.2 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 5.3 %  
Chronic pulmonary disease..... 10.5 %  
Cerebrovascular degeneration..... 2.6 %  
Diabetes mellitus..... 0.0 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 51.2%  
State ..... 48.8%  
Outside State ..... 0.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 6.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 58  
Occupancy Rate ..... 41.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 9.9 %  
Case Mix Index (CMI) ..... 0.7862

### STAFFING:

Total Number of Physicians..... 8  
Percent of Physicians Board  
Certified Specialists ..... 50.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 7  
Licensed Practical Nurses ..... 5

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# UNITED MEMORIAL HOSPITAL

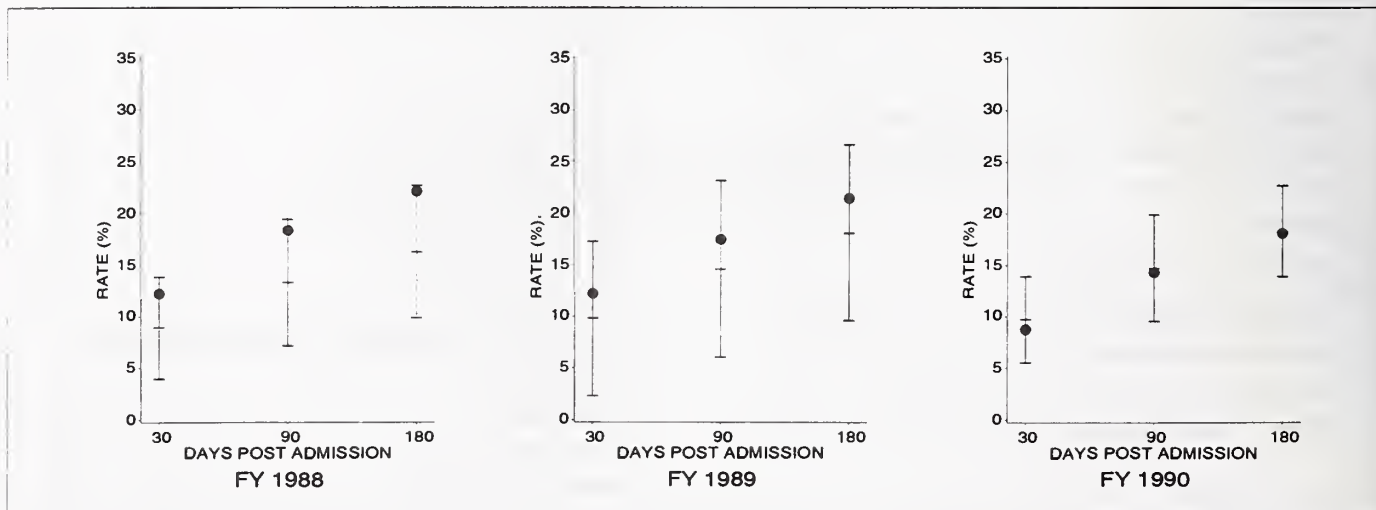
615 S BOWER STREET  
GREENVILLE, MI 48838  
Medicare Provider Number: 230035

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 321             | 8.7                 | 9.7  | 2.1  | 14.3    | 14.7 | 2.6  | 18.1     | 18.3 | 2.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 6               | 0.0                 | 21.8 | ---- | 0.0     | 25.1 | ---- | 0.0      | 28.7 | ---- |
| Congestive Heart Failure.....              | 23              | 8.7                 | 15.6 | ---- | 8.7     | 24.7 | ---- | 26.1     | 31.1 | ---- |
| Pneumonia/Influenza.....                   | 38              | 10.5                | 14.6 | ---- | 13.2    | 19.8 | ---- | 15.8     | 23.3 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 42.9                | 11.3 | ---- | 42.9    | 17.6 | ---- | 57.1     | 21.9 | ---- |
| Transient Cerebral Ischemia.....           | 5               | 0.0                 | 1.8  | ---- | 20.0    | 4.3  | ---- | 20.0     | 7.6  | ---- |
| Stroke.....                                | 4               | 75.0                | 27.9 | ---- | 75.0    | 40.6 | ---- | 75.0     | 46.4 | ---- |
| Hip Fracture.....                          | 9               | 11.1                | 8.4  | ---- | 22.2    | 14.3 | ---- | 22.2     | 17.8 | ---- |
| Sepsis.....                                | 5               | 40.0                | 40.0 | ---- | 60.0    | 47.2 | ---- | 60.0     | 51.1 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 4               | 0.0                 | 8.2  | ---- | 25.0    | 14.7 | ---- | 25.0     | 18.0 | ---- |
| Open Reduction of Hip Fracture.....        | 3               | 33.3                | 5.8  | ---- | 33.3    | 9.9  | ---- | 33.3     | 12.7 | ---- |
| Prostatectomy.....                         | 0               |                     |      |      |         |      |      |          |      |      |
| Cholecystectomy.....                       | 9               | 0.0                 | 1.1  | ---- | 0.0     | 2.1  | ---- | 0.0      | 3.0  | ---- |
| Hysterectomy.....                          | 2               | 0.0                 | 0.4  | ---- | 0.0     | 1.0  | ---- | 0.0      | 1.6  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# UNITED MEMORIAL HOSPITAL

Medicare Provider Number: 230035

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.4 years  
Proportion female..... 63.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 31.2 %  
Transferred from skilled nursing facility..... 0.9 %  
Admitted for elective procedure..... 0.3 %  
Admitted for emergency..... 24.6 %

### COMORBIDITIES:

Cancer..... 4.0 %  
Chronic cardiovascular disease..... 31.5 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 2.8 %  
Chronic pulmonary disease..... 17.1 %  
Cerebrovascular degeneration..... 5.6 %  
Diabetes mellitus..... 10.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 67.5%  
State ..... 31.4%  
Outside State ..... 1.1%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.9 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 79  
Occupancy Rate ..... 60.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.1 %  
Case Mix Index (CMI) ..... 1.0997

### STAFFING:

Total Number of Physicians..... 16  
Percent of Physicians Board  
Certified Specialists ..... 62.5 %  
Medical Residents/Interns ..... 0  
Registered Nurses ..... 31  
Licensed Practical Nurses ..... 20

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... Yes

\*\* Except for CMI

\* Not used in calculating mortality rates

# UNIVERSITY HOSPITAL

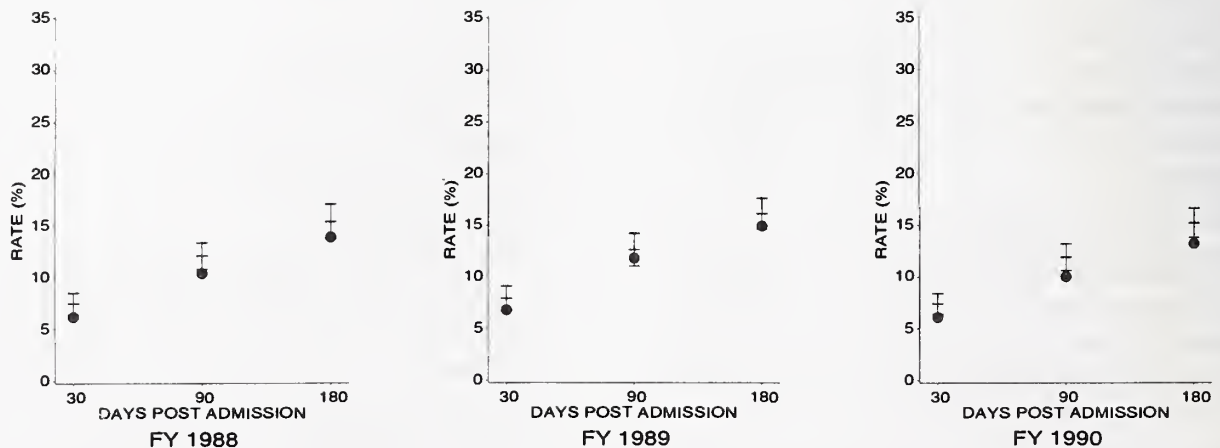
1500 E MEDICAL CENTER DRIVE  
ANN ARBOR, MI 48104  
Medicare Provider Number: 230046

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3932            | 6.1                 | 7.4  | 0.5  | 10.0    | 11.9 | 0.7  | 13.2     | 15.2 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 59              | 23.7                | 27.6 | 6.1  | 25.4    | 30.9 | 6.6  | 27.1     | 33.7 | 6.9  |
| Congestive Heart Failure.....              | 89              | 10.1                | 13.9 | 7.0  | 19.1    | 22.0 | 6.8  | 23.6     | 28.0 | 6.2  |
| Pneumonia/Influenza.....                   | 54              | 14.8                | 14.7 | 4.9  | 20.4    | 21.0 | 5.6  | 22.2     | 24.6 | 6.3  |
| Chronic Obstructive Pulmonary Disease..... | 33              | 6.1                 | 10.0 | ---- | 12.1    | 17.6 | ---- | 24.2     | 23.3 | ---- |
| Transient Cerebral Ischemia.....           | 9               | 0.0                 | 1.3  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.8  | ---- |
| Stroke.....                                | 56              | 32.1                | 23.4 | 6.8  | 39.3    | 30.4 | 7.2  | 48.2     | 34.3 | 8.3  |
| Hip Fracture.....                          | 30              | 10.0                | 7.9  | ---- | 10.0    | 13.9 | ---- | 20.0     | 18.0 | ---- |
| Sepsis.....                                | 15              | 40.0                | 22.0 | ---- | 40.0    | 29.1 | ---- | 46.7     | 33.0 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 96              | 3.1                 | 3.2  | 2.2  | 5.2     | 4.3  | 2.5  | 8.3      | 5.3  | 3.6  |
| Coronary Artery Bypass Graft.....          | 113             | 9.7                 | 5.5  | 3.3  | 13.3    | 8.1  | 4.0  | 15.0     | 9.3  | 4.1  |
| Initial Pacemaker Insertion.....           | 25              | 0.0                 | 1.5  | ---- | 0.0     | 3.2  | ---- | 0.0      | 5.0  | ---- |
| Carotid Endarterectomy.....                | 20              | 0.0                 | 1.3  | ---- | 0.0     | 2.6  | ---- | 0.0      | 4.0  | ---- |
| Hip Replacement/Reconstruction.....        | 57              | 3.5                 | 2.3  | 3.1  | 3.5     | 4.3  | 3.7  | 5.3      | 5.8  | 3.7  |
| Open Reduction of Hip Fracture.....        | 15              | 6.7                 | 6.9  | ---- | 6.7     | 12.9 | ---- | 20.0     | 17.4 | ---- |
| Prostatectomy.....                         | 42              | 0.0                 | 0.5  | ---- | 2.4     | 1.2  | ---- | 2.4      | 2.1  | ---- |
| Cholecystectomy.....                       | 39              | 5.1                 | 5.1  | ---- | 10.3    | 10.2 | ---- | 12.8     | 14.4 | ---- |
| Hysterectomy.....                          | 36              | 0.0                 | 0.7  | ---- | 2.8     | 1.6  | ---- | 5.6      | 2.7  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# UNIVERSITY HOSPITAL

Medicare Provider Number: 230046

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 67.9 years

Proportion female..... 51.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 55.9 %

Transferred from skilled nursing facility..... 1.0 %

Admitted for elective procedure..... 44.3 %

Admitted for emergency..... 40.2 %

### COMORBIDITIES:

Cancer..... 10.2 %

Chronic cardiovascular disease..... 37.5 %

Chronic liver disease..... 1.7 %

Chronic renal disease..... 6.8 %

Chronic pulmonary disease..... 11.6 %

Cerebrovascular degeneration..... 3.5 %

Diabetes mellitus..... 8.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 14.0%

State ..... 79.6%

Outside State ..... 6.4%

Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.8 Days

State ..... 8.5 Days

National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 857

Occupancy Rate ..... 83.0 %

Ownership/Control..... Private, Non-Profit

Medicare Discharges ..... 22.4 %

Case Mix Index (CMI) ..... 1.6376

### STAFFING:

Total Number of Physicians..... 801

Percent of Physicians Board  
Certified Specialists ..... 61.5 %

Medical Residents/Interns ..... 580

Registered Nurses..... 1466

Licensed Practical Nurses..... 103

### SPECIALTY SERVICES:

Burn Unit ..... Yes

Cardiac Intensive Care ..... Yes

Comprehensive Geriatric ..... Yes

Hospice Care ..... No

Medical/Surgical Intensive Care ..... Yes

Organ/Tissue Transplant ..... Yes

Other Intensive Care ..... No

Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug..... No

Rehabilitation..... Yes

Psychiatric ..... Yes

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

**VISITORS HOSPITAL**  
 15198 MAIN ST  
 BUCHANAN, MI 49107  
 Medicare Provider Number: 230161

**FY 1990 MEDICARE HOSPITAL MORTALITY RATES**

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 1                  | 0.0                 | 0.1  | ----- | 0.0     | 0.2  | ----- | 0.0      | 0.3  | ----- |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 0                  |                     |      |       |         |      |       |          |      |       |
| Pneumonia/Influenza.....                   | 0                  |                     |      |       |         |      |       |          |      |       |
| Chronic Obstructive Pulmonary Disease..... | 0                  |                     |      |       |         |      |       |          |      |       |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Stroke.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 0                  |                     |      |       |         |      |       |          |      |       |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

**OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD)  
 FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES**

No Graphs are presented when the standard deviation  
 was not computed for one or more of the three fiscal years,  
 (1988, 1989, or 1990)



**VISITORS HOSPITAL**  
Medicare Provider Number: 230161

**FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES**

**DEMOGRAPHICS:**

Average age at admission..... 24.0 years

Proportion female..... 0.0 %

**ADMISSION SOURCES/TYPES:**

Referred by personal or HMO physician..... 100.0 %

Transferred from skilled nursing facility..... 0.0 %

Admitted for elective procedure..... 0.0 %

Admitted for emergency..... 0.0 %

**COMORBIDITIES:**

Cancer..... 0.0 %

Chronic cardiovascular disease..... 0.0 %

Chronic liver disease..... 0.0 %

Chronic renal disease..... 0.0 %

Chronic pulmonary disease..... 0.0 %

Cerebrovascular degeneration..... 0.0 %

Diabetes mellitus..... 0.0 %

**ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\***

**ORIGIN OF MEDICARE PATIENT ADMISSION:**

County/City ..... 0.0%

State ..... 0.0%

Outside State ..... 100.0%

Total ..... 100.0%

**MEDICARE AVERAGE LENGTH OF STAY:**

Hospital ..... 9.5 Days

State ..... 8.5 Days

National ..... 8.6 Days

**HOSPITAL CHARACTERISTICS\***

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

**PROFILE:**

Total Beds ..... 42

Occupancy Rate ..... 69.0 %

Ownership/Control..... Private, For Profit

Medicare Discharges ..... 38.5 %

Case Mix Index (CMI) ..... 1.9047

**STAFFING:**

Total Number of Physicians..... 7

Percent of Physicians Board  
Certified Specialists..... 42.9 %

Medical Residents/Interns ..... 0

Registered Nurses..... 15

Licensed Practical Nurses..... 14

**SPECIALTY SERVICES:**

Burn Unit ..... No

Cardiac Intensive Care ..... No

Comprehensive Geriatric ..... No

Hospice Care ..... No

Medical/Surgical Intensive Care ..... No

Organ/Tissue Transplant ..... No

Other Intensive Care ..... No

Trauma Center ..... No

**OTHER SPECIALTY/HOSPITAL-BASED SERVICES:**

Alcohol/Drug ..... No

Rehabilitation..... Yes

Psychiatric ..... No

Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# W A FOOTE MEMORIAL HOSPITAL

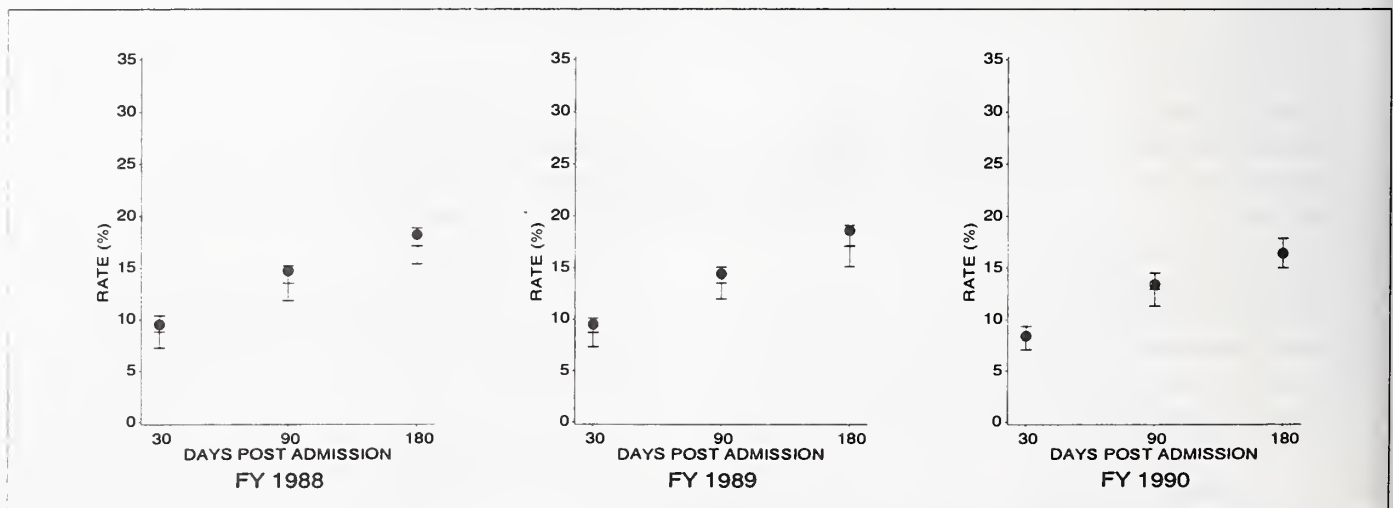
205 N EAST AVE  
JACKSON, MI 49201  
Medicare Provider Number: 230092

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 3272            | 8.4                 | 8.2  | 0.6  | 13.4    | 12.9 | 0.8  | 16.4     | 16.4 | 0.7  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 100             | 22.0                | 25.0 | 5.0  | 30.0    | 28.3 | 4.9  | 32.0     | 31.0 | 5.0  |
| Congestive Heart Failure.....              | 177             | 10.2                | 14.3 | 4.6  | 22.0    | 22.9 | 4.1  | 26.0     | 29.3 | 4.5  |
| Pneumonia/Influenza.....                   | 130             | 13.8                | 13.4 | 3.7  | 20.0    | 18.4 | 3.8  | 21.5     | 22.0 | 3.7  |
| Chronic Obstructive Pulmonary Disease..... | 57              | 0.0                 | 7.2  | 5.0  | 5.3     | 12.7 | 5.8  | 12.3     | 17.3 | 6.9  |
| Transient Cerebral Ischemia.....           | 69              | 0.0                 | 1.7  | 2.1  | 1.4     | 3.8  | 3.1  | 2.9      | 6.3  | 4.3  |
| Stroke.....                                | 113             | 27.4                | 19.4 | 8.5  | 31.0    | 25.4 | 8.5  | 33.6     | 29.1 | 8.4  |
| Hip Fracture.....                          | 106             | 7.5                 | 7.2  | 2.7  | 11.3    | 12.8 | 3.5  | 15.1     | 16.5 | 3.9  |
| Sepsis.....                                | 41              | 24.4                | 28.3 | ---- | 31.7    | 35.6 | ---- | 36.6     | 40.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 35              | 2.9                 | 2.8  | ---- | 2.9     | 5.2  | ---- | 5.7      | 7.4  | ---- |
| Carotid Endarterectomy.....                | 16              | 0.0                 | 1.5  | ---- | 0.0     | 2.9  | ---- | 0.0      | 4.3  | ---- |
| Hip Replacement/Reconstruction.....        | 80              | 10.0                | 4.0  | 4.1  | 11.2    | 7.2  | 3.9  | 13.7     | 9.4  | 4.3  |
| Open Reduction of Hip Fracture.....        | 56              | 0.0                 | 6.0  | 4.7  | 5.4     | 11.2 | 6.2  | 8.9      | 15.1 | 7.3  |
| Prostatectomy.....                         | 98              | 2.0                 | 0.8  | 1.4  | 3.1     | 1.8  | 1.7  | 3.1      | 3.2  | 1.8  |
| Cholecystectomy.....                       | 79              | 2.5                 | 1.9  | 2.9  | 2.5     | 3.4  | 3.5  | 3.8      | 4.6  | 4.2  |
| Hysterectomy.....                          | 21              | 0.0                 | 0.3  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.1  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# W A FOOTE MEMORIAL HOSPITAL

Medicare Provider Number: 230092

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.7 years  
Proportion female..... 56.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 42.5 %  
Transferred from skilled nursing facility..... 0.1 %  
Admitted for elective procedure..... 19.4 %  
Admitted for emergency..... 3.5 %

### COMORBIDITIES:

Cancer..... 8.6 %  
Chronic cardiovascular disease..... 36.6 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 3.0 %  
Chronic pulmonary disease..... 20.2 %  
Cerebrovascular degeneration..... 3.6 %  
Diabetes mellitus..... 8.4 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 86.4%  
State ..... 11.7%  
Outside State ..... 1.9%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.2 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 432  
Occupancy Rate ..... 54.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 32.8 %  
Case Mix Index (CMI) ..... 1.2127

### STAFFING:

Total Number of Physicians..... 143  
Percent of Physicians Board  
Certified Specialists..... 65.7 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 317  
Licensed Practical Nurses ..... 102

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... Yes  
Rehabilitation..... No  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# WEST SHORE HOSPITAL

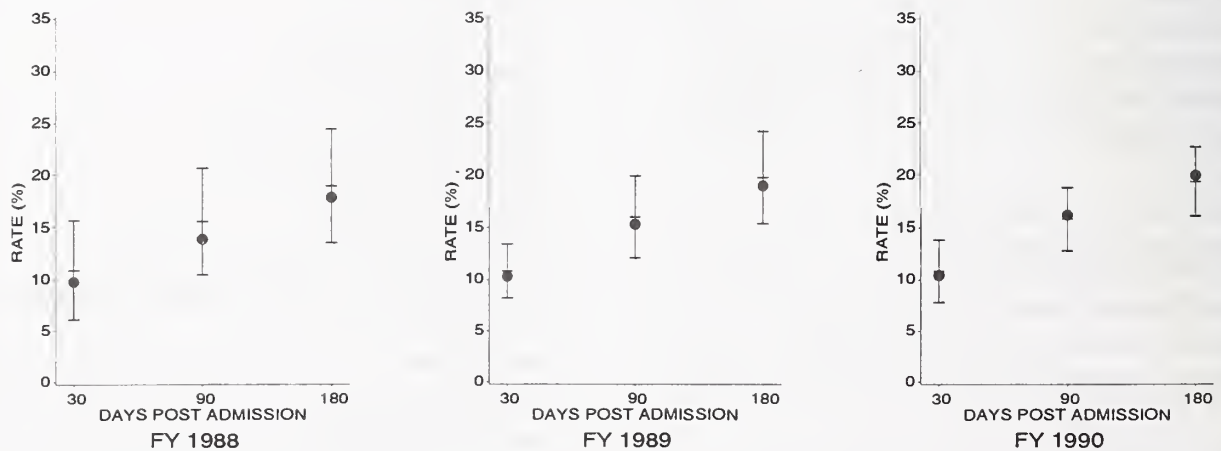
1465 E PARKDALE AVENUE  
MANISTEE, MI 49660  
Medicare Provider Number: 230060

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 634             | 10.4                | 10.8 | 1.5   | 16.2    | 15.8 | 1.5   | 20.0     | 19.4 | 1.7   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 31              | 35.5                | 30.6 | ----- | 38.7    | 33.9 | ----- | 41.9     | 36.7 | ----- |
| Congestive Heart Failure.....              | 50              | 16.0                | 14.5 | ----- | 22.0    | 22.8 | ----- | 28.0     | 28.9 | ----- |
| Pneumonia/Influenza.....                   | 49              | 14.3                | 17.1 | ----- | 20.4    | 23.8 | ----- | 22.4     | 28.0 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 7               | 14.3                | 13.8 | ----- | 14.3    | 22.6 | ----- | 14.3     | 30.2 | ----- |
| Transient Cerebral Ischemia.....           | 13              | 0.0                 | 1.8  | ----- | 0.0     | 4.0  | ----- | 7.7      | 6.6  | ----- |
| Stroke.....                                | 27              | 14.8                | 19.6 | ----- | 33.3    | 25.9 | ----- | 37.0     | 29.7 | ----- |
| Hip Fracture.....                          | 17              | 5.9                 | 7.1  | ----- | 11.8    | 12.3 | ----- | 11.8     | 15.7 | ----- |
| Sepsis.....                                | 5               | 20.0                | 18.9 | ----- | 20.0    | 26.5 | ----- | 20.0     | 32.1 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 2               | 0.0                 | 1.9  | ----- | 0.0     | 4.2  | ----- | 0.0      | 6.4  | ----- |
| Carotid Endarterectomy.....                | 8               | 0.0                 | 0.9  | ----- | 0.0     | 1.7  | ----- | 0.0      | 2.5  | ----- |
| Hip Replacement/Reconstruction.....        | 5               | 20.0                | 6.0  | ----- | 20.0    | 11.8 | ----- | 20.0     | 15.6 | ----- |
| Open Reduction of Hip Fracture.....        | 11              | 0.0                 | 5.6  | ----- | 9.1     | 9.6  | ----- | 9.1      | 12.5 | ----- |
| Prostatectomy.....                         | 0               |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 24              | 4.2                 | 2.8  | ----- | 4.2     | 4.8  | ----- | 8.3      | 6.3  | ----- |
| Hysterectomy.....                          | 9               | 0.0                 | 0.6  | ----- | 0.0     | 1.3  | ----- | 0.0      | 2.1  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# WEST SHORE HOSPITAL

Medicare Provider Number: 230060

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 75.4 years |
| Proportion female.....        | 52.7 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 41.3 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 5.4 %  |
| Admitted for emergency.....                    | 88.5 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 7.4 %  |
| Chronic cardiovascular disease..... | 43.2 % |
| Chronic liver disease.....          | 0.8 %  |
| Chronic renal disease.....          | 1.6 %  |
| Chronic pulmonary disease.....      | 9.6 %  |
| Cerebrovascular degeneration.....   | 2.7 %  |
| Diabetes mellitus.....              | 9.0 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City.....    | 83.8%  |
| State .....         | 13.6%  |
| Outside State ..... | 2.6%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.1 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                  |
|----------------------------|------------------|
| Total Beds .....           | 54               |
| Occupancy Rate .....       | 55.0 %           |
| Ownership/Control.....     | Local Government |
| Medicare Discharges .....  | 52.5 %           |
| Case Mix Index (CMI) ..... | 1.1385           |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 23     |
| Percent of Physicians Board<br>Certified Specialists ..... | 60.9 % |
| Medical Residents/Interns .....                            | 0      |
| Registered Nurses.....                                     | 46     |
| Licensed Practical Nurses .....                            | 20     |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# WESTLAND MEDICAL CENTER

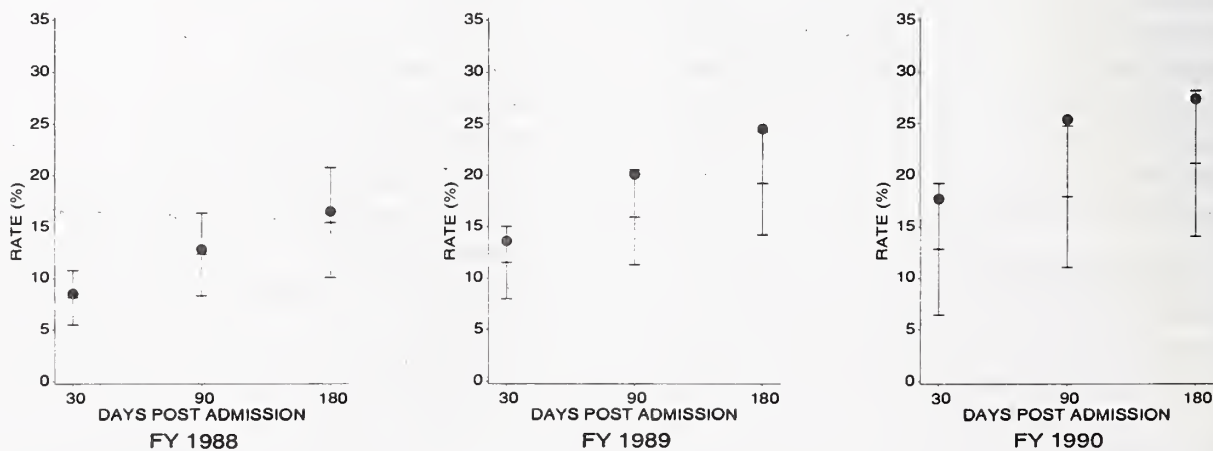
2345 MERRIMAN RD  
WESTLAND, MI 48185  
Medicare Provider Number: 230098

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 248                | 17.7                | 12.8 | 3.2  | 25.4    | 17.9 | 3.4  | 27.4     | 21.1 | 3.5  |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 11                 | 54.5                | 22.1 | ---- | 54.5    | 24.5 | ---- | 54.5     | 26.6 | ---- |
| Congestive Heart Failure.....              | 7                  | 28.6                | 11.8 | ---- | 28.6    | 17.9 | ---- | 42.9     | 22.6 | ---- |
| Pneumonia/Influenza.....                   | 16                 | 37.5                | 16.5 | ---- | 43.8    | 22.5 | ---- | 50.0     | 25.8 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 7                  | 14.3                | 11.6 | ---- | 28.6    | 19.7 | ---- | 28.6     | 25.2 | ---- |
| Transient Cerebral Ischemia.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Stroke.....                                | 4                  | 0.0                 | 17.2 | ---- | 25.0    | 22.2 | ---- | 25.0     | 26.0 | ---- |
| Hip Fracture.....                          | 9                  | 11.1                | 7.1  | ---- | 33.3    | 13.5 | ---- | 33.3     | 17.5 | ---- |
| Sepsis.....                                | 6                  | 66.7                | 34.5 | ---- | 83.3    | 41.8 | ---- | 83.3     | 46.4 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0                  |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0                  |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 5                  | 0.0                 | 5.3  | ---- | 20.0    | 9.8  | ---- | 20.0     | 12.7 | ---- |
| Open Reduction of Hip Fracture.....        | 4                  | 0.0                 | 5.6  | ---- | 50.0    | 11.2 | ---- | 50.0     | 14.9 | ---- |
| Prostatectomy.....                         | 8                  | 0.0                 | 0.3  | ---- | 12.5    | 0.8  | ---- | 12.5     | 1.5  | ---- |
| Cholecystectomy.....                       | 1                  | 0.0                 | 0.5  | ---- | 0.0     | 0.7  | ---- | 0.0      | 1.1  | ---- |
| Hysterectomy.....                          | 0                  |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WESTLAND MEDICAL CENTER

Medicare Provider Number: 230098

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 67.2 years  
Proportion female..... 48.0 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 7.3 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 6.5 %  
Admitted for emergency..... 77.4 %

### COMORBIDITIES:

Cancer..... 3.2 %  
Chronic cardiovascular disease..... 37.5 %  
Chronic liver disease..... 1.2 %  
Chronic renal disease..... 3.2 %  
Chronic pulmonary disease..... 15.7 %  
Cerebrovascular degeneration..... 17.3 %  
Diabetes mellitus..... 15.3 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 93.7%  
State ..... 3.5%  
Outside State ..... 2.8%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: Health Care Financing Administration (OSCAR)\*\* - Survey Year 1988

### PROFILE:

Total Beds ..... 256  
Ownership/Control..... Local Government  
Case Mix Index (CMI) ..... 1.4035

### STAFFING:

Medical Residents/Interns ..... 11  
Registered Nurses..... 68  
Licensed Practical Nurses ..... 3

### SPECIALTY SERVICES:

Burn Unit ..... No  
Coronary Care Unit ..... Yes  
Hospice Care ..... No  
Intensive Care Unit ..... Yes  
Organ Transplant ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# WHELOCK MEMORIAL HOSPITAL

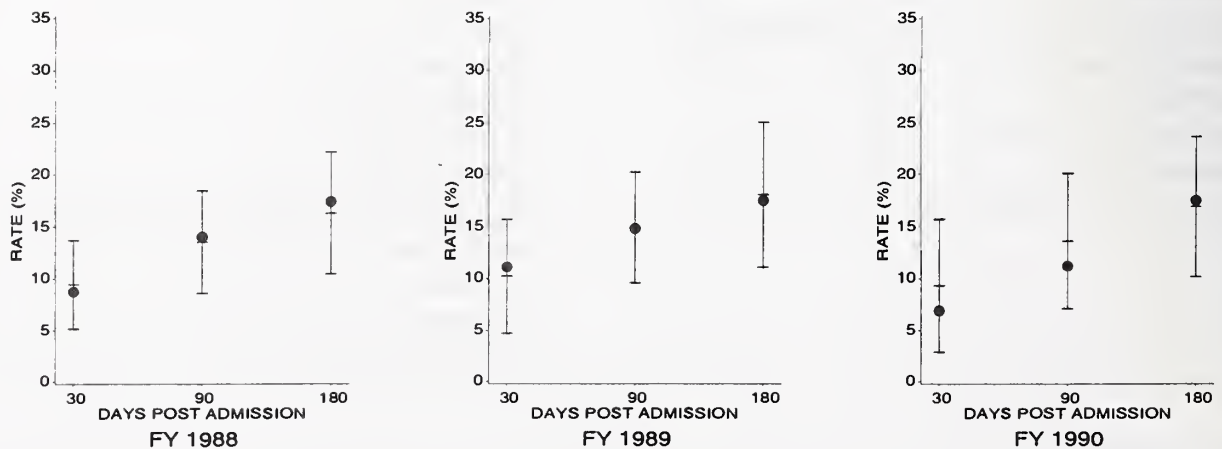
7280 STATE RD  
GOODRICH, MI 48438  
Medicare Provider Number: 230111

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 160             | 6.9                 | 9.3  | 3.2  | 11.2    | 13.6 | 3.3  | 17.5     | 16.9 | 3.4  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 7               | 14.3                | 30.7 | ---- | 14.3    | 33.5 | ---- | 14.3     | 36.2 | ---- |
| Congestive Heart Failure.....              | 14              | 21.4                | 14.6 | ---- | 28.6    | 22.5 | ---- | 50.0     | 28.1 | ---- |
| Pneumonia/Influenza.....                   | 7               | 0.0                 | 16.9 | ---- | 14.3    | 22.7 | ---- | 28.6     | 28.3 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 2               | 0.0                 | 14.5 | ---- | 0.0     | 25.4 | ---- | 0.0      | 32.2 | ---- |
| Transient Cerebral Ischemia.....           | 7               | 0.0                 | 1.4  | ---- | 14.3    | 3.2  | ---- | 14.3     | 5.4  | ---- |
| Stroke.....                                | 5               | 0.0                 | 19.9 | ---- | 0.0     | 29.1 | ---- | 0.0      | 34.4 | ---- |
| Hip Fracture.....                          | 0               |                     |      |      |         |      |      |          |      |      |
| Sepsis.....                                | 1               | 100.0               | 29.6 | ---- | 100.0   | 35.0 | ---- | 100.0    | 41.3 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |      |         |      |      |          |      |      |
| Initial Pacemaker Insertion.....           | 0               |                     |      |      |         |      |      |          |      |      |
| Carotid Endarterectomy.....                | 0               |                     |      |      |         |      |      |          |      |      |
| Hip Replacement/Reconstruction.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Open Reduction of Hip Fracture.....        | 0               |                     |      |      |         |      |      |          |      |      |
| Prostatectomy.....                         | 7               | 0.0                 | 1.0  | ---- | 0.0     | 2.4  | ---- | 0.0      | 4.2  | ---- |
| Cholecystectomy.....                       | 4               | 0.0                 | 1.7  | ---- | 0.0     | 2.7  | ---- | 0.0      | 3.4  | ---- |
| Hysterectomy.....                          | 0               |                     |      |      |         |      |      |          |      |      |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# WHEELOCK MEMORIAL HOSPITAL

Medicare Provider Number: 230111

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 76.1 years |
| Proportion female.....        | 57.1 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 25.5 % |
| Transferred from skilled nursing facility..... | 0.0 %  |
| Admitted for elective procedure.....           | 0.0 %  |
| Admitted for emergency.....                    | 73.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 6.8 %  |
| Chronic cardiovascular disease..... | 49.1 % |
| Chronic liver disease.....          | 0.0 %  |
| Chronic renal disease.....          | 0.6 %  |
| Chronic pulmonary disease.....      | 14.3 % |
| Cerebrovascular degeneration.....   | 2.5 %  |
| Diabetes mellitus.....              | 8.1 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 60.9%  |
| State .....         | 36.0%  |
| Outside State ..... | 3.1%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.0 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 31                  |
| Occupancy Rate .....       | 32.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 33.2 %              |
| Case Mix Index (CMI) ..... | 0.9648              |

### STAFFING:

|                                                           |        |
|-----------------------------------------------------------|--------|
| Total Number of Physicians.....                           | 27     |
| Percent of Physicians Board<br>Certified Specialists..... | 44.4 % |
| Medical Residents/Interns .....                           | 0      |
| Registered Nurses.....                                    | 21     |
| Licensed Practical Nurses .....                           | 3      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | Yes |
| Medical/Surgical Intensive Care ..... | No  |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# WILLIAM BEAUMONT HOSPITAL

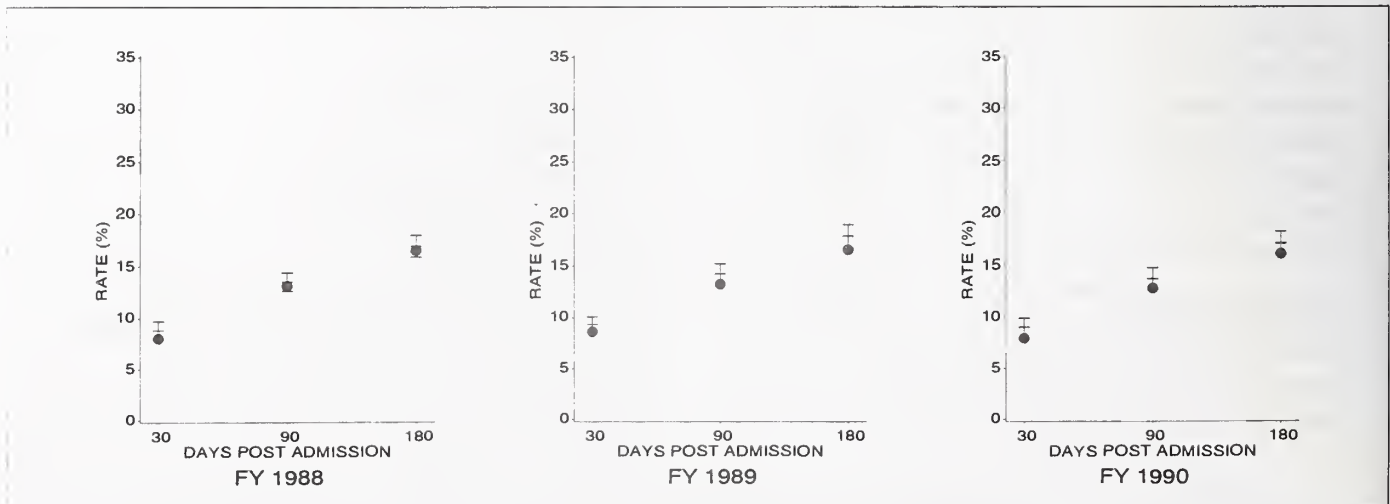
3601 W 13 MILE ROAD  
ROYAL OAK, MI 48072  
Medicare Provider Number: 230130

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 8004            | 7.9                 | 9.0  | 0.4   | 12.8    | 13.7 | 0.5   | 16.1     | 17.1 | 0.6   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 291             | 23.7                | 24.3 | 3.1   | 26.8    | 27.5 | 3.0   | 29.9     | 30.2 | 3.1   |
| Congestive Heart Failure.....              | 320             | 14.7                | 15.8 | 2.4   | 25.0    | 25.0 | 2.4   | 34.4     | 31.6 | 3.5   |
| Pneumonia/Influenza.....                   | 190             | 18.9                | 18.0 | 2.9   | 25.3    | 24.4 | 3.3   | 29.5     | 28.5 | 3.6   |
| Chronic Obstructive Pulmonary Disease..... | 94              | 7.4                 | 13.5 | 5.7   | 19.1    | 21.9 | 6.4   | 25.5     | 27.2 | 5.5   |
| Transient Cerebral Ischemia.....           | 98              | 0.0                 | 1.7  | 1.8   | 1.0     | 3.8  | 3.0   | 5.1      | 6.2  | 2.6   |
| Stroke.....                                | 324             | 12.3                | 19.5 | 3.7   | 21.6    | 26.9 | 3.4   | 25.6     | 30.9 | 3.3   |
| Hip Fracture.....                          | 206             | 6.3                 | 7.0  | 2.1   | 10.7    | 12.4 | 2.8   | 13.6     | 16.1 | 3.5   |
| Sepsis.....                                | 99              | 22.2                | 25.9 | 5.8   | 29.3    | 33.8 | 7.7   | 34.3     | 38.4 | 8.8   |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 318             | 6.6                 | 3.6  | 1.8   | 8.5     | 4.6  | 2.2   | 9.4      | 5.7  | 2.3   |
| Coronary Artery Bypass Graft.....          | 311             | 7.4                 | 6.0  | 1.7   | 9.6     | 8.5  | 1.8   | 10.9     | 9.7  | 2.0   |
| Initial Pacemaker Insertion.....           | 41              | 0.0                 | 3.0  | ----- | 2.4     | 5.7  | ----- | 7.3      | 8.1  | ----- |
| Carotid Endarterectomy.....                | 60              | 0.0                 | 1.8  | 2.4   | 0.0     | 3.3  | 3.7   | 1.7      | 4.8  | 3.8   |
| Hip Replacement/Reconstruction.....        | 194             | 3.6                 | 3.0  | 1.3   | 6.7     | 5.7  | 1.7   | 8.8      | 7.7  | 2.4   |
| Open Reduction of Hip Fracture.....        | 132             | 4.5                 | 6.2  | 4.0   | 7.6     | 11.4 | 5.4   | 10.6     | 15.2 | 6.0   |
| Prostatectomy.....                         | 312             | 0.6                 | 0.8  | 0.5   | 1.0     | 1.9  | 0.8   | 1.3      | 3.3  | 1.2   |
| Cholecystectomy.....                       | 133             | 2.3                 | 2.5  | 1.5   | 3.0     | 4.5  | 2.6   | 3.8      | 5.8  | 3.5   |
| Hysterectomy.....                          | 90              | 0.0                 | 0.6  | ----- | 1.1     | 1.4  | ----- | 1.1      | 2.3  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WILLIAM BEAUMONT HOSPITAL

Medicare Provider Number: 230130

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.2 years |
| Proportion female.....        | 54.4 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 33.8 % |
| Transferred from skilled nursing facility..... | 0.1 %  |
| Admitted for elective procedure.....           | 26.2 % |
| Admitted for emergency.....                    | 61.0 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 9.0 %  |
| Chronic cardiovascular disease..... | 40.6 % |
| Chronic liver disease.....          | 0.7 %  |
| Chronic renal disease.....          | 4.4 %  |
| Chronic pulmonary disease.....      | 10.6 % |
| Cerebrovascular degeneration.....   | 3.8 %  |
| Diabetes mellitus.....              | 7.7 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 68.5%  |
| State .....         | 29.1%  |
| Outside State ..... | 2.4%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 9.3 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 875                 |
| Occupancy Rate .....       | 78.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 34.5 %              |
| Case Mix Index (CMI) ..... | 1.5278              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 827    |
| Percent of Physicians Board<br>Certified Specialists ..... | 88.1 % |
| Medical Residents/Interns .....                            | 269    |
| Registered Nurses.....                                     | 1065   |
| Licensed Practical Nurses .....                            | 138    |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | Yes |
| Comprehensive Geriatric .....         | Yes |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | Yes |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | Yes |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |     |
|---------------------------|-----|
| Alcohol/Drug .....        | No  |
| Rehabilitation.....       | Yes |
| Psychiatric .....         | Yes |
| Medicare Swing Beds ..... | No  |

\*\* Except for CMI

\* Not used in calculating mortality rates

# WILLIAM BEAUMONT HOSPITAL

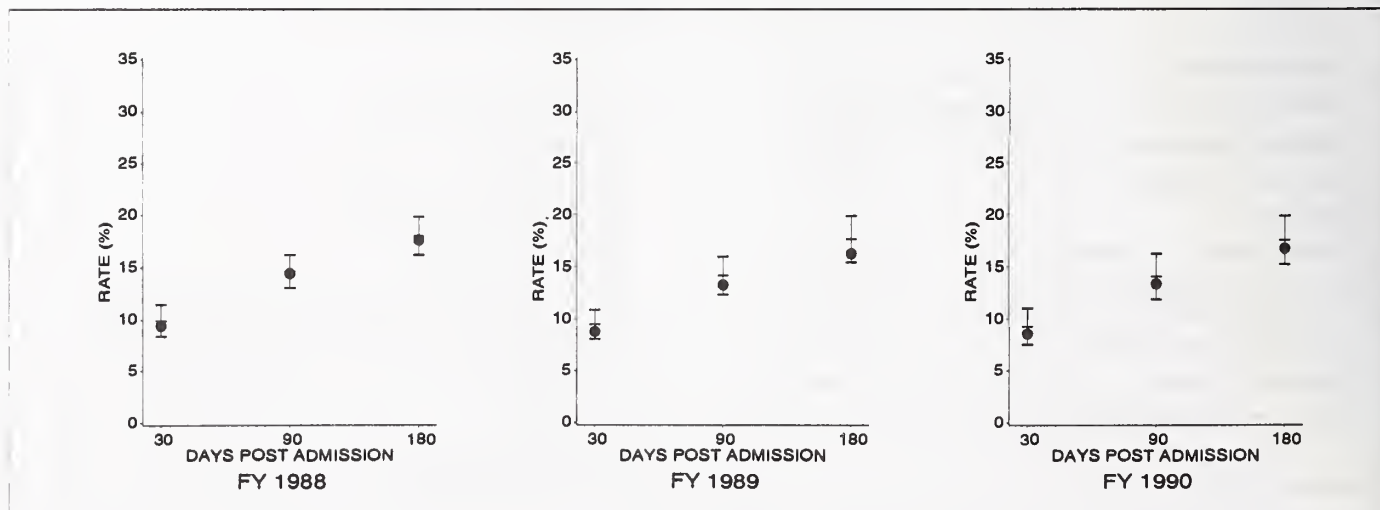
44201 DEQUINDRE  
TROY, MI 48098  
Medicare Provider Number: 230269

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|-----------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                 | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                 | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 2364            | 8.6                 | 9.3  | 0.9  | 13.4    | 14.1 | 1.1  | 16.8     | 17.6 | 1.2  |
| CONDITIONS:                                |                 |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 67              | 10.4                | 22.7 | 7.5  | 14.9    | 25.5 | 8.5  | 14.9     | 27.9 | 8.1  |
| Congestive Heart Failure.....              | 121             | 16.5                | 13.5 | 4.2  | 24.0    | 21.4 | 5.2  | 28.9     | 28.0 | 6.1  |
| Pneumonia/Influenza.....                   | 96              | 26.0                | 16.5 | 5.9  | 33.3    | 22.3 | 7.0  | 38.5     | 26.4 | 7.5  |
| Chronic Obstructive Pulmonary Disease..... | 43              | 9.3                 | 8.2  | ---- | 16.3    | 14.0 | ---- | 20.9     | 18.3 | ---- |
| Transient Cerebral Ischemia.....           | 32              | 9.4                 | 2.2  | ---- | 12.5    | 4.8  | ---- | 25.0     | 7.7  | ---- |
| Stroke.....                                | 94              | 11.7                | 18.7 | 7.4  | 20.2    | 25.4 | 7.2  | 25.5     | 29.3 | 7.5  |
| Hip Fracture.....                          | 58              | 5.2                 | 8.0  | 6.3  | 15.5    | 13.8 | 5.0  | 17.2     | 17.6 | 5.0  |
| Sepsis.....                                | 44              | 25.0                | 22.5 | ---- | 45.5    | 30.2 | ---- | 47.7     | 34.9 | ---- |
| PROCEDURES:                                |                 |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 0               |                     |      |      |         |      |      |          |      |      |
| Coronary Artery Bypass Graft.....          | 1               | 0.0                 | 11.6 | ---- | 0.0     | 13.3 | ---- | 0.0      | 14.1 | ---- |
| Initial Pacemaker Insertion.....           | 4               | 0.0                 | 1.3  | ---- | 0.0     | 2.8  | ---- | 0.0      | 4.2  | ---- |
| Carotid Endarterectomy.....                | 9               | 11.1                | 0.9  | ---- | 22.2    | 1.8  | ---- | 22.2     | 2.8  | ---- |
| Hip Replacement/Reconstruction.....        | 32              | 0.0                 | 4.7  | ---- | 6.3     | 8.8  | ---- | 6.3      | 11.9 | ---- |
| Open Reduction of Hip Fracture.....        | 28              | 7.1                 | 7.6  | ---- | 21.4    | 13.4 | ---- | 21.4     | 17.2 | ---- |
| Prostatectomy.....                         | 167             | 0.0                 | 0.8  | 1.0  | 2.4     | 1.8  | 1.3  | 3.6      | 3.1  | 1.7  |
| Cholecystectomy.....                       | 49              | 0.0                 | 1.5  | ---- | 0.0     | 2.7  | ---- | 2.0      | 3.7  | ---- |
| Hysterectomy.....                          | 20              | 0.0                 | 0.1  | ---- | 0.0     | 0.2  | ---- | 0.0      | 0.4  | ---- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# WILLIAM BEAUMONT HOSPITAL

Medicare Provider Number: 230269

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

|                               |            |
|-------------------------------|------------|
| Average age at admission..... | 74.6 years |
| Proportion female.....        | 57.3 %     |

### ADMISSION SOURCES/TYPES:

|                                                |        |
|------------------------------------------------|--------|
| Referred by personal or HMO physician.....     | 36.4 % |
| Transferred from skilled nursing facility..... | 0.3 %  |
| Admitted for elective procedure.....           | 20.1 % |
| Admitted for emergency.....                    | 64.3 % |

### COMORBIDITIES:

|                                     |        |
|-------------------------------------|--------|
| Cancer.....                         | 8.0 %  |
| Chronic cardiovascular disease..... | 41.1 % |
| Chronic liver disease.....          | 1.1 %  |
| Chronic renal disease.....          | 3.3 %  |
| Chronic pulmonary disease.....      | 22.7 % |
| Cerebrovascular degeneration.....   | 2.8 %  |
| Diabetes mellitus.....              | 9.5 %  |

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

|                     |        |
|---------------------|--------|
| County/City .....   | 40.4%  |
| State .....         | 57.1%  |
| Outside State ..... | 2.5%   |
| Total .....         | 100.0% |

### MEDICARE AVERAGE LENGTH OF STAY:

|                |          |
|----------------|----------|
| Hospital ..... | 7.3 Days |
| State .....    | 8.5 Days |
| National ..... | 8.6 Days |

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

|                            |                     |
|----------------------------|---------------------|
| Total Beds .....           | 189                 |
| Occupancy Rate .....       | 74.0 %              |
| Ownership/Control.....     | Private, Non-Profit |
| Medicare Discharges .....  | 40.2 %              |
| Case Mix Index (CMI) ..... | 1.2518              |

### STAFFING:

|                                                            |        |
|------------------------------------------------------------|--------|
| Total Number of Physicians.....                            | 348    |
| Percent of Physicians Board<br>Certified Specialists ..... | 70.1 % |
| Medical Residents/Interns .....                            | 12     |
| Registered Nurses .....                                    | 294    |
| Licensed Practical Nurses .....                            | 9      |

### SPECIALTY SERVICES:

|                                       |     |
|---------------------------------------|-----|
| Burn Unit .....                       | No  |
| Cardiac Intensive Care .....          | No  |
| Comprehensive Geriatric .....         | No  |
| Hospice Care .....                    | No  |
| Medical/Surgical Intensive Care ..... | Yes |
| Organ/Tissue Transplant .....         | No  |
| Other Intensive Care .....            | No  |
| Trauma Center .....                   | No  |

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

|                           |    |
|---------------------------|----|
| Alcohol/Drug .....        | No |
| Rehabilitation.....       | No |
| Psychiatric .....         | No |
| Medicare Swing Beds ..... | No |

\*\* Except for CMI

\* Not used in calculating mortality rates

# WYANDOTTE HOSPITAL & MEDICAL CENTER

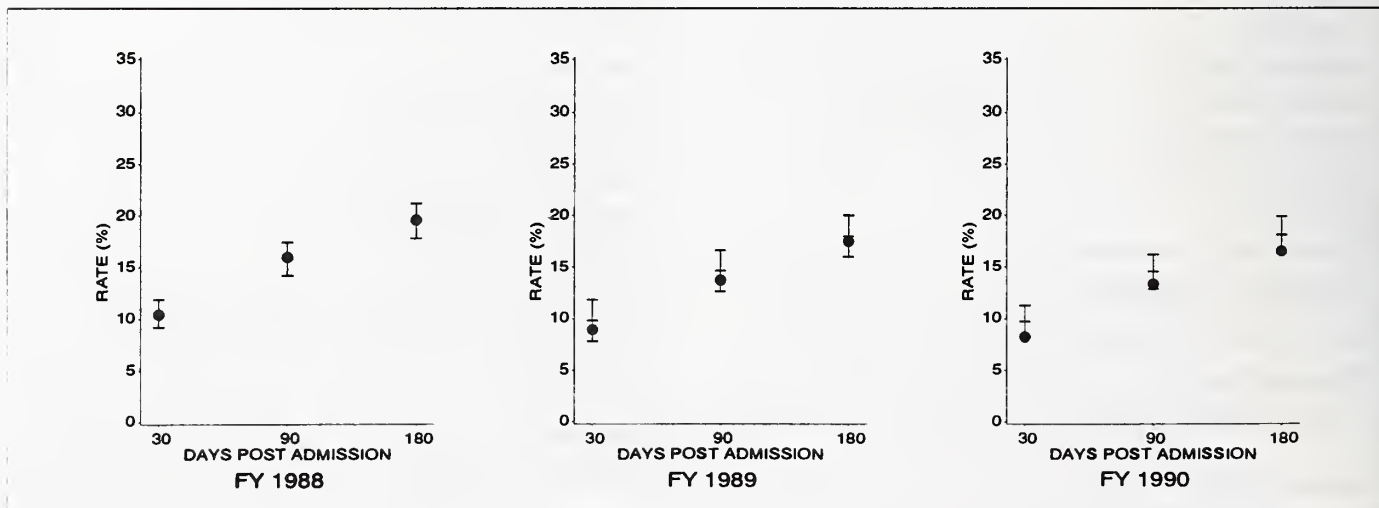
2333 BIDDLE AVE  
WYANDOTTE, MI 48192  
Medicare Provider Number: 230146

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 2495            | 8.2                 | 9.7  | 0.8   | 13.3    | 14.5 | 0.9   | 16.5     | 18.1 | 0.9   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 78              | 23.1                | 22.9 | 5.3   | 26.9    | 25.5 | 6.0   | 26.9     | 27.9 | 6.3   |
| Congestive Heart Failure.....              | 196             | 15.8                | 14.8 | 2.9   | 24.5    | 23.5 | 3.2   | 29.6     | 30.0 | 3.3   |
| Pneumonia/Influenza.....                   | 100             | 14.0                | 14.7 | 5.1   | 19.0    | 20.1 | 4.4   | 23.0     | 23.8 | 4.8   |
| Chronic Obstructive Pulmonary Disease..... | 46              | 2.2                 | 13.1 | ----- | 4.3     | 20.3 | ----- | 10.9     | 25.6 | ----- |
| Transient Cerebral Ischemia.....           | 30              | 0.0                 | 2.5  | ----- | 3.3     | 5.3  | ----- | 10.0     | 8.3  | ----- |
| Stroke.....                                | 94              | 16.0                | 19.3 | 8.1   | 22.3    | 25.4 | 7.1   | 24.5     | 29.0 | 6.8   |
| Hip Fracture.....                          | 56              | 5.4                 | 6.4  | 3.4   | 8.9     | 11.0 | 5.1   | 10.7     | 14.3 | 6.5   |
| Sepsis.....                                | 34              | 14.7                | 27.0 | ----- | 32.4    | 35.4 | ----- | 35.3     | 39.9 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 16              | 0.0                 | 3.3  | ----- | 0.0     | 6.6  | ----- | 6.3      | 9.3  | ----- |
| Carotid Endarterectomy.....                | 17              | 0.0                 | 2.2  | ----- | 0.0     | 3.9  | ----- | 0.0      | 5.6  | ----- |
| Hip Replacement/Reconstruction.....        | 44              | 2.3                 | 2.4  | ----- | 2.3     | 4.5  | ----- | 2.3      | 6.2  | ----- |
| Open Reduction of Hip Fracture.....        | 29              | 6.9                 | 6.5  | ----- | 6.9     | 11.6 | ----- | 10.3     | 15.4 | ----- |
| Prostatectomy.....                         | 80              | 1.2                 | 1.1  | 1.4   | 2.5     | 2.5  | 2.3   | 2.5      | 4.1  | 3.2   |
| Cholecystectomy.....                       | 67              | 1.5                 | 2.2  | 1.9   | 3.0     | 4.1  | 2.7   | 4.5      | 5.6  | 3.6   |
| Hysterectomy.....                          | 27              | 0.0                 | 0.7  | ----- | 0.0     | 1.3  | ----- | 0.0      | 1.9  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# WYANDOTTE HOSPITAL & MEDICAL CENTER

Medicare Provider Number: 230146

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 73.8 years  
Proportion female..... 55.3 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 27.7 %  
Transferred from skilled nursing facility..... 0.0 %  
Admitted for elective procedure..... 14.3 %  
Admitted for emergency..... 69.7 %

### COMORBIDITIES:

Cancer..... 8.5 %  
Chronic cardiovascular disease..... 37.2 %  
Chronic liver disease..... 1.1 %  
Chronic renal disease..... 3.3 %  
Chronic pulmonary disease..... 18.6 %  
Cerebrovascular degeneration..... 2.5 %  
Diabetes mellitus..... 7.8 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 96.7%  
State ..... 1.9%  
Outside State ..... 1.4%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 9.8 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 343  
Occupancy Rate ..... 78.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.5 %  
Case Mix Index (CMI) ..... 1.1596

### STAFFING:

Total Number of Physicians..... 216  
Percent of Physicians Board  
Certified Specialists ..... 69.9 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 241  
Licensed Practical Nurses ..... 42

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... Yes  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... Yes  
Psychiatric ..... Yes  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# YALE COMMUNITY HOSPITAL INC

420 NORTH STREET

YALE, MI 48097

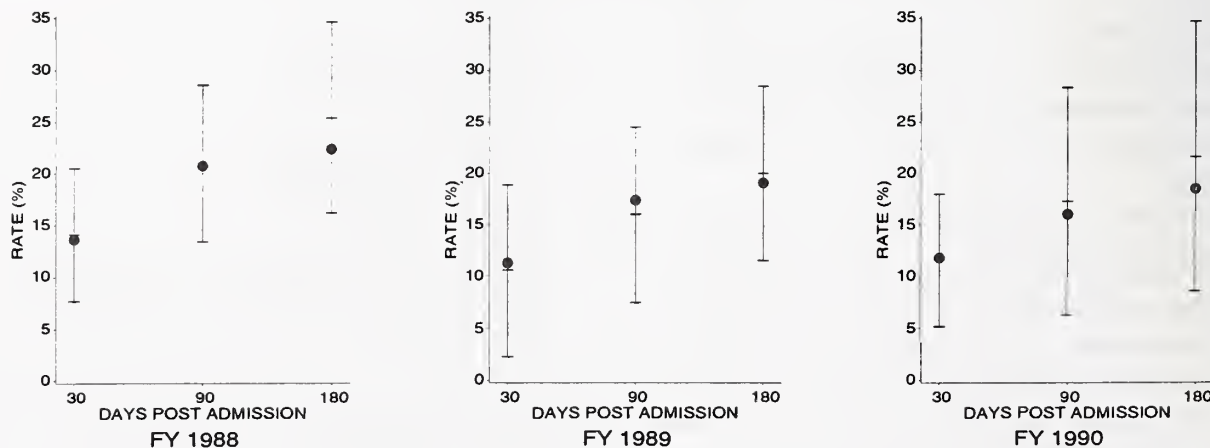
Medicare Provider Number: 230232

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|--------------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                    | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                    | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 119                | 11.8                | 11.6 | 3.2   | 16.0    | 17.3 | 5.5   | 18.5     | 21.6 | 6.5   |
| CONDITIONS:                                |                    |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Congestive Heart Failure.....              | 11                 | 36.4                | 18.1 | ----- | 36.4    | 28.9 | ----- | 45.5     | 36.1 | ----- |
| Pneumonia/Influenza.....                   | 33                 | 12.1                | 16.3 | ----- | 18.2    | 22.8 | ----- | 18.2     | 27.5 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 10                 | 10.0                | 8.1  | ----- | 10.0    | 14.0 | ----- | 10.0     | 19.3 | ----- |
| Transient Cerebral Ischemia.....           | 1                  | 0.0                 | 1.8  | ----- | 0.0     | 4.6  | ----- | 0.0      | 8.2  | ----- |
| Stroke.....                                | 1                  | 0.0                 | 21.9 | ----- | 0.0     | 30.6 | ----- | 0.0      | 35.2 | ----- |
| Hip Fracture.....                          | 0                  |                     |      |       |         |      |       |          |      |       |
| Sepsis.....                                | 0                  |                     |      |       |         |      |       |          |      |       |
| PROCEDURES:                                |                    |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0                  |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0                  |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0                  |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0                  |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Open Reduction of Hip Fracture.....        | 0                  |                     |      |       |         |      |       |          |      |       |
| Prostatectomy.....                         | 0                  |                     |      |       |         |      |       |          |      |       |
| Cholecystectomy.....                       | 2                  | 0.0                 | 0.6  | ----- | 0.0     | 1.3  | ----- | 0.0      | 1.8  | ----- |
| Hysterectomy.....                          | 0                  |                     |      |       |         |      |       |          |      |       |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (\*) AND PREDICTED RANGE ( $\pm 2$ SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES





# YALE COMMUNITY HOSPITAL INC

Medicare Provider Number: 230232

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.4 years  
Proportion female..... 52.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 47.9 %  
Transferred from skilled nursing facility..... 1.7 %  
Admitted for elective procedure..... 0.0 %  
Admitted for emergency..... 87.4 %

### COMORBIDITIES:

Cancer..... 7.6 %  
Chronic cardiovascular disease..... 38.7 %  
Chronic liver disease..... 0.0 %  
Chronic renal disease..... 0.8 %  
Chronic pulmonary disease..... 41.2 %  
Cerebrovascular degeneration..... 5.0 %  
Diabetes mellitus..... 7.6 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 77.4%  
State ..... 22.1%  
Outside State ..... 0.5%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 4.6 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 22  
Occupancy Rate ..... 22.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 39.2 %  
Case Mix Index (CMI) ..... 1.0598

### STAFFING:

Total Number of Physicians..... 7  
Percent of Physicians Board  
Certified Specialists ..... 100.0 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 9  
Licensed Practical Nurses ..... 6

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... No  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care ..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# ZEELAND COMMUNITY HOSPITAL

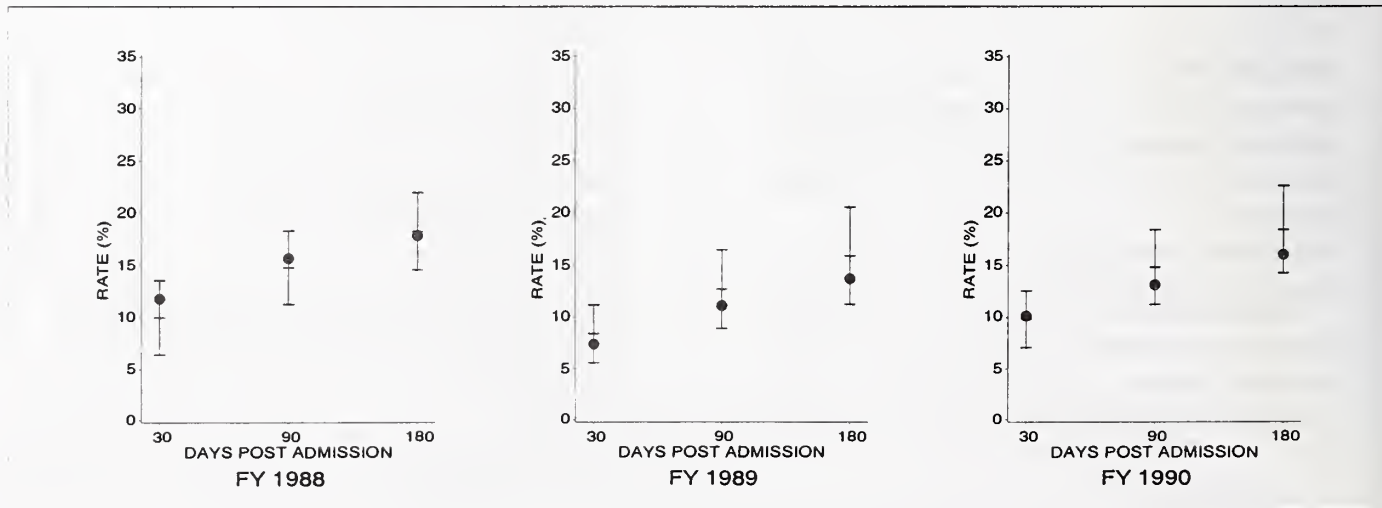
129 SOUTH TAFT STREET  
ZEELAND, MI 49464  
Medicare Provider Number: 230003

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER OF CASES | MORTALITY RATES (%) |      |       |         |      |       |          |      |       |
|--------------------------------------------|-----------------|---------------------|------|-------|---------|------|-------|----------|------|-------|
|                                            |                 | 30 DAYS             |      |       | 90 DAYS |      |       | 180 DAYS |      |       |
|                                            |                 | OBS                 | PRED | SD*   | OBS     | PRED | SD*   | OBS      | PRED | SD*   |
| ALL CAUSES.....                            | 495             | 10.1                | 9.8  | 1.4   | 13.1    | 14.8 | 1.8   | 16.0     | 18.4 | 2.1   |
| CONDITIONS:                                |                 |                     |      |       |         |      |       |          |      |       |
| Acute Myocardial Infarction.....           | 12              | 25.0                | 27.3 | ----- | 25.0    | 29.6 | ----- | 41.7     | 32.1 | ----- |
| Congestive Heart Failure.....              | 32              | 15.6                | 15.0 | ----- | 21.9    | 24.5 | ----- | 31.3     | 31.4 | ----- |
| Pneumonia/Influenza.....                   | 34              | 20.6                | 15.9 | ----- | 29.4    | 21.8 | ----- | 35.3     | 25.9 | ----- |
| Chronic Obstructive Pulmonary Disease..... | 4               | 0.0                 | 9.0  | ----- | 0.0     | 17.4 | ----- | 0.0      | 25.0 | ----- |
| Transient Cerebral Ischemia.....           | 8               | 0.0                 | 1.7  | ----- | 0.0     | 4.0  | ----- | 0.0      | 6.8  | ----- |
| Stroke.....                                | 21              | 23.8                | 20.5 | ----- | 23.8    | 27.7 | ----- | 23.8     | 31.7 | ----- |
| Hip Fracture.....                          | 15              | 6.7                 | 6.7  | ----- | 6.7     | 11.9 | ----- | 13.3     | 15.6 | ----- |
| Sepsis.....                                | 9               | 22.2                | 17.8 | ----- | 33.3    | 27.2 | ----- | 33.3     | 32.5 | ----- |
| PROCEDURES:                                |                 |                     |      |       |         |      |       |          |      |       |
| Angioplasty.....                           | 0               |                     |      |       |         |      |       |          |      |       |
| Coronary Artery Bypass Graft.....          | 0               |                     |      |       |         |      |       |          |      |       |
| Initial Pacemaker Insertion.....           | 0               |                     |      |       |         |      |       |          |      |       |
| Carotid Endarterectomy.....                | 0               |                     |      |       |         |      |       |          |      |       |
| Hip Replacement/Reconstruction.....        | 6               | 0.0                 | 4.3  | ----- | 0.0     | 8.0  | ----- | 16.7     | 11.1 | ----- |
| Open Reduction of Hip Fracture.....        | 7               | 14.3                | 6.5  | ----- | 14.3    | 11.4 | ----- | 14.3     | 14.9 | ----- |
| Prostatectomy.....                         | 26              | 3.8                 | 0.7  | ----- | 7.7     | 1.7  | ----- | 7.7      | 3.0  | ----- |
| Cholecystectomy.....                       | 17              | 0.0                 | 1.4  | ----- | 0.0     | 3.1  | ----- | 5.9      | 4.6  | ----- |
| Hysterectomy.....                          | 8               | 0.0                 | 0.4  | ----- | 0.0     | 0.9  | ----- | 0.0      | 1.7  | ----- |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

### OBSERVED MORTALITY RATE (•) AND PREDICTED RANGE (± 2 SD) FOR MEDICARE PATIENT ADMISSIONS FOR ALL CAUSES



# ZEELAND COMMUNITY HOSPITAL

Medicare Provider Number: 230003

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 77.7 years  
Proportion female..... 53.1 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 93.5 %  
Transferred from skilled nursing facility..... 5.3 %  
Admitted for elective procedure..... 14.3 %  
Admitted for emergency..... 64.4 %

### COMORBIDITIES:

Cancer..... 6.5 %  
Chronic cardiovascular disease..... 46.9 %  
Chronic liver disease..... 0.6 %  
Chronic renal disease..... 2.2 %  
Chronic pulmonary disease..... 8.5 %  
Cerebrovascular degeneration..... 4.2 %  
Diabetes mellitus..... 15.2 %

## ORIGIN AND LENGTH OF STAY OF MEDICARE ADMISSIONS\*

### ORIGIN OF MEDICARE PATIENT ADMISSION:

County/City ..... 82.1%  
State ..... 15.9%  
Outside State ..... 2.0%  
Total ..... 100.0%

### MEDICARE AVERAGE LENGTH OF STAY:

Hospital ..... 7.0 Days  
State ..... 8.5 Days  
National ..... 8.6 Days

## HOSPITAL CHARACTERISTICS\*

SOURCE: AHA Annual Survey of Hospitals\*\* - Survey Year 1990

### PROFILE:

Total Beds ..... 55  
Occupancy Rate ..... 47.0 %  
Ownership/Control..... Private, Non-Profit  
Medicare Discharges ..... 33.1 %  
Case Mix Index (CMI) ..... 1.1336

### STAFFING:

Total Number of Physicians..... 48  
Percent of Physicians Board  
Certified Specialists..... 68.8 %  
Medical Residents/Interns ..... 0  
Registered Nurses..... 45  
Licensed Practical Nurses..... 33

### SPECIALTY SERVICES:

Burn Unit ..... No  
Cardiac Intensive Care ..... Yes  
Comprehensive Geriatric ..... No  
Hospice Care ..... No  
Medical/Surgical Intensive Care..... No  
Organ/Tissue Transplant ..... No  
Other Intensive Care ..... No  
Trauma Center ..... No

### OTHER SPECIALTY/HOSPITAL-BASED SERVICES:

Alcohol/Drug ..... No  
Rehabilitation..... No  
Psychiatric ..... No  
Medicare Swing Beds ..... No

\*\* Except for CMI

\* Not used in calculating mortality rates

# MICHIGAN

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |     |         |      |     |          |      |     |
|--------------------------------------------|--------------------|---------------------|------|-----|---------|------|-----|----------|------|-----|
|                                            |                    | 30 DAYS             |      |     | 90 DAYS |      |     | 180 DAYS |      |     |
|                                            |                    | OBS                 | PRED | SD* | OBS     | PRED | SD* | OBS      | PRED | SD* |
| ALL CAUSES.....                            | 225,069            | 9.4                 | 9.4  | 0.1 | 14.5    | 14.2 | 0.3 | 18.0     | 17.7 | 0.2 |
| CONDITIONS:                                |                    |                     |      |     |         |      |     |          |      |     |
| Acute Myocardial Infarction.....           | 7,307              | 24.5                | 25.2 | 0.6 | 28.4    | 28.3 | 1.0 | 31.2     | 30.9 | 1.0 |
| Congestive Heart Failure.....              | 12,802             | 14.5                | 14.5 | 0.5 | 23.2    | 23.0 | 0.5 | 29.5     | 29.2 | 0.5 |
| Pneumonia/Influenza.....                   | 9,634              | 15.8                | 16.1 | 0.6 | 22.5    | 22.0 | 0.6 | 26.8     | 25.9 | 0.9 |
| Chronic Obstructive Pulmonary Disease..... | 2,968              | 8.7                 | 9.7  | 0.8 | 15.6    | 16.3 | 0.9 | 20.8     | 21.1 | 1.0 |
| Transient Cerebral Ischemia.....           | 3,544              | 2.0                 | 1.8  | 0.3 | 4.5     | 4.1  | 0.4 | 7.1      | 6.6  | 0.6 |
| Stroke.....                                | 8,898              | 18.7                | 19.5 | 0.6 | 26.1    | 26.3 | 0.6 | 30.0     | 30.1 | 0.7 |
| Hip Fracture.....                          | 5,424              | 7.7                 | 7.0  | 0.5 | 13.3    | 12.2 | 0.7 | 17.1     | 15.8 | 0.8 |
| Sepsis.....                                | 2,859              | 25.7                | 26.5 | 0.9 | 36.4    | 34.9 | 1.4 | 41.7     | 39.7 | 1.8 |
| PROCEDURES:                                |                    |                     |      |     |         |      |     |          |      |     |
| Angioplasty.....                           | 2,303              | 2.9                 | 2.9  | 0.4 | 4.0     | 3.8  | 0.6 | 5.4      | 4.7  | 0.8 |
| Coronary Artery Bypass Graft.....          | 3,409              | 5.6                 | 5.4  | 0.5 | 7.8     | 7.7  | 0.5 | 9.0      | 8.7  | 0.6 |
| Initial Pacemaker Insertion.....           | 1,579              | 3.5                 | 3.1  | 0.7 | 7.4     | 6.1  | 1.1 | 9.4      | 8.9  | 1.2 |
| Carotid Endarterectomy.....                | 1,551              | 1.0                 | 1.6  | 0.5 | 2.1     | 2.9  | 0.7 | 3.1      | 4.2  | 0.8 |
| Hip Replacement/Reconstruction.....        | 4,417              | 3.5                 | 3.0  | 0.4 | 6.2     | 5.6  | 0.6 | 8.2      | 7.5  | 0.6 |
| Open Reduction of Hip Fracture.....        | 2,931              | 6.7                 | 6.5  | 0.5 | 12.7    | 11.7 | 1.0 | 16.4     | 15.4 | 1.2 |
| Prostatectomy.....                         | 7,995              | 0.8                 | 0.9  | 0.1 | 2.2     | 2.0  | 0.2 | 3.6      | 3.5  | 0.2 |
| Cholecystectomy.....                       | 4,439              | 2.8                 | 2.5  | 0.5 | 4.6     | 4.6  | 0.5 | 5.9      | 6.2  | 0.6 |
| Hysterectomy.....                          | 1,961              | 0.9                 | 0.6  | 0.6 | 1.8     | 1.3  | 1.1 | 2.3      | 2.2  | 1.1 |

\* The Standard Deviation (SD) is not calculated if the number of deaths or cases is too small for satisfactory estimation.

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

|                                                |            |                                     |        |
|------------------------------------------------|------------|-------------------------------------|--------|
| DEMOGRAPHICS:                                  |            | COMORBIDITIES:                      |        |
| Average age at admission.....                  | 74.0 years | Cancer.....                         | 8.0 %  |
| Proportion female.....                         | 55.2 %     | Chronic cardiovascular disease..... | 39.7 % |
| ADMISSION SOURCES/TYPES:                       |            | Chronic liver disease.....          | 0.9 %  |
| Referred by personal or HMO physician.....     | 39.8 %     | Chronic renal disease.....          | 3.8 %  |
| Transferred from skilled nursing facility..... | 0.6 %      | Chronic pulmonary disease.....      | 15.0 % |
| Admitted for elective procedure.....           | 21.6 %     | Cerebrovascular degeneration.....   | 3.7 %  |
| Admitted for emergency.....                    | 55.7 %     | Diabetes mellitus.....              | 8.8 %  |



# ALL STATES

## FY 1990 MEDICARE HOSPITAL MORTALITY RATES

| CATEGORY                                   | NUMBER<br>OF CASES | MORTALITY RATES (%) |      |      |         |      |      |          |      |      |
|--------------------------------------------|--------------------|---------------------|------|------|---------|------|------|----------|------|------|
|                                            |                    | 30 DAYS             |      |      | 90 DAYS |      |      | 180 DAYS |      |      |
|                                            |                    | OBS                 | PRED | SD*  | OBS     | PRED | SD*  | OBS      | PRED | SD*  |
| ALL CAUSES.....                            | 6,542,299          | 9.0                 | 9.0  | ---- | 13.9    | 13.7 | ---- | 17.3     | 17.1 | ---- |
| CONDITIONS:                                |                    |                     |      |      |         |      |      |          |      |      |
| Acute Myocardial Infarction.....           | 204,673            | 25.3                | 25.6 | ---- | 29.5    | 28.7 | ---- | 32.1     | 31.4 | ---- |
| Congestive Heart Failure.....              | 335,426            | 14.3                | 14.4 | ---- | 22.9    | 22.8 | ---- | 29.2     | 29.0 | ---- |
| Pneumonia/Influenza.....                   | 313,303            | 15.3                | 15.5 | ---- | 21.5    | 21.3 | ---- | 25.5     | 25.1 | ---- |
| Chronic Obstructive Pulmonary Disease..... | 107,387            | 8.0                 | 8.0  | ---- | 14.1    | 14.0 | ---- | 18.7     | 18.5 | ---- |
| Transient Cerebral Ischemia.....           | 96,866             | 1.8                 | 1.8  | ---- | 4.0     | 4.0  | ---- | 6.4      | 6.5  | ---- |
| Stroke.....                                | 241,803            | 19.7                | 19.8 | ---- | 26.5    | 26.3 | ---- | 30.4     | 30.0 | ---- |
| Hip Fracture.....                          | 163,386            | 6.7                 | 6.5  | ---- | 11.7    | 11.5 | ---- | 15.1     | 15.0 | ---- |
| Sepsis.....                                | 80,999             | 25.6                | 25.7 | ---- | 34.6    | 33.8 | ---- | 39.8     | 38.6 | ---- |
| PROCEDURES:                                |                    |                     |      |      |         |      |      |          |      |      |
| Angioplasty.....                           | 58,026             | 3.0                 | 3.0  | ---- | 4.0     | 4.0  | ---- | 5.0      | 4.9  | ---- |
| Coronary Artery Bypass Graft.....          | 80,798             | 6.0                 | 5.7  | ---- | 8.3     | 8.1  | ---- | 9.5      | 9.2  | ---- |
| Initial Pacemaker Insertion.....           | 49,642             | 3.2                 | 3.3  | ---- | 6.5     | 6.3  | ---- | 9.1      | 9.1  | ---- |
| Carotid Endarterectomy.....                | 29,990             | 1.6                 | 1.5  | ---- | 2.8     | 2.8  | ---- | 4.0      | 4.1  | ---- |
| Hip Replacement/Reconstruction.....        | 122,156            | 3.4                 | 3.2  | ---- | 6.2     | 5.9  | ---- | 8.1      | 8.0  | ---- |
| Open Reduction of Hip Fracture.....        | 80,075             | 6.1                 | 6.0  | ---- | 11.2    | 11.0 | ---- | 14.5     | 14.5 | ---- |
| Prostatectomy.....                         | 211,087            | 0.9                 | 1.0  | ---- | 2.2     | 2.3  | ---- | 3.7      | 3.8  | ---- |
| Cholecystectomy.....                       | 124,259            | 2.9                 | 2.7  | ---- | 5.0     | 4.9  | ---- | 6.5      | 6.5  | ---- |
| Hysterectomy.....                          | 53,905             | 0.7                 | 0.7  | ---- | 1.4     | 1.5  | ---- | 2.2      | 2.4  | ---- |

\* The Standard Deviation (SD) is not calculated.

## FY1990 VALUES FOR SELECTED EXPLANATORY FACTORS USED TO PREDICT MORTALITY RATES

### DEMOGRAPHICS:

Average age at admission..... 74.1 years  
Proportion female..... 55.9 %

### ADMISSION SOURCES/TYPES:

Referred by personal or HMO physician..... 46.1 %  
Transferred from skilled nursing facility..... 1.1 %  
Admitted for elective procedure..... 22.0 %  
Admitted for emergency..... 46.5 %

### COMORBIDITIES:

Cancer..... 7.6 %  
Chronic cardiovascular disease..... 36.6 %  
Chronic liver disease..... 1.0 %  
Chronic renal disease..... 3.4 %  
Chronic pulmonary disease..... 15.0 %  
Cerebrovascular degeneration..... 3.9 %  
Diabetes mellitus..... 8.0 %



# **Hospital Comments**

BAY MEDICAL CENTER  
1900 Columbus Avenue  
Bay City, Michigan  
48708

March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

RE: Medicare I.D. # 230041

Dear Ms. Wilensky:

Representatives of the hospital's Quality Assurance and Medical Staff have reviewed the mortality information from HCFA about Medicare patients discharged from Bay Medical Center in fiscal year 1990. The following comments are submitted for your consideration:

DATA VERIFICATION:

Our records indicate the number of Medicare discharges to be higher in fiscal year 1990 than the figures released by HCFA. Presumably, the discrepancy continues to reflect multiple admissions of individual beneficiaries to Bay Medical Center.

It is impossible to determine the cause of death in most of the patients dying after discharge from Bay Medical Center. However, review of certain categories demonstrate numerous patients who expired greater than 180 days after the selected admission. This would seem to indicate overstatement of the actual mortality rate calculated (i.e., Hip Replacement & Cholecystectomy).

DATA INTERPRETATION:

Our actual mortality rate, as reported by HCFA, continues to fall within the range of predicted mortality rates for All Causes, the diagnostic conditions and procedures reported. This year our assessment focused on four categories in which our actual mortality rate (while within the predicted range) was at the high end of the range. These were Chronic Obstructive Pulmonary Disease, Carotid Endarterectomy, Hip Replacement/Reconstruction and Cholecystectomy. Following note both our general and specific findings of these categories:

General findings:

- \* A significant number of the patient's who died were terminally ill and the family requested "Do Not Resuscitate" orders during their admission.
- \* The average age of the patients who died was over 77 years; and
- \* A significant number of the patients who died had multiple comorbid conditions.



DATA INTERPRETATION: (continued)

Specific findings:

- \* Cholecystectomy: Three of the patients had this procedure as part of the treatment for known pancreatic cancer which was simply palliative for a known terminal condition.
- \* Hip Replacement/Reconstruction: The three inpatient deaths were from known complications to other preexisting conditions. The other four patients were discharged with no evidence of complications but all had numerous comorbid conditions.
- \* Carotid Endarterectomy: Three of the patients expired greater than 180 days from the identified admissions which reduces the reported observed mortality rate by half.
- \* Chronic Obstructive Pulmonary Disease: Eight of the eleven patients were known to be in a terminal stage of their disease and did not wish any resuscitative measures as documented in their records.

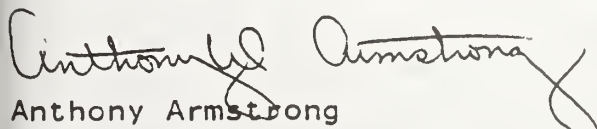
The remaining categories were not felt to reflect significant variation requiring comment.

SUMMARY:

Bay Medical Center is the sole community provider caring for a significant portion of the severely ill patients from this community and has a long standing commitment to ensuring the highest quality of care for our patients. We voluntarily maintain accreditation through the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). This commitment is carried out through the operation of a comprehensive Quality Assurance Program. This program is under the overall direction of the Board of Directors and is implemented and carried out by its Medical and Dental Staff and Administration. It is designed to monitor and evaluate the quality and appropriateness of care, pursue opportunities to improve care and to resolve identified problems. This program incorporates not only mortality review but also a vast array of other peer review activities. It is decentralized to all levels of the organization with the principal responsibility being that of the respective hospital and Medical Staff departments.

Bay Medical Center continues to support the efforts of the American Hospital Association, JCAHO and other organizations that are investigating objective methods of evaluating hospital quality that rely on measures in addition to and other than mortality rates. We have been and shall continue to be committed to any activities that can assure our public of the highest quality of care and will insist upon their development.

Yours very truly,

  
Anthony Armstrong  
President



# Bi-County Community Hospital (Osteopathic)

AN AFFILIATE OF HORIZON HEALTH SYSTEMS

Medicare Provider #230204

March 5, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12 Security Office Park Building  
6325 Security Blvd.  
Baltimore, MD 21207-5187

ATTENTION: Robert Moore

## A RESPONSE TO THE HCFA MEDICARE MORTALITY DATA

Bi-County Community Hospital is a 247 bed acute care facility, which includes intensive and coronary care, as well as emergency services. We also have many subspecialists on staff whose primary practice site is at Bi-County Community Hospital. Many of our physicians are participating physicians at local extended care facilities. As a result, nearly 60% of our admissions are Medicare recipients and over 20% of these are transferred from nursing homes. Therefore, the more severely ill patient is being attracted and admitted to our hospital. This has been repeatedly confirmed by the Michigan Hospital Association statistics that show Bi-County Community Hospital as having more cases with one or more co-morbidities than the state average. Co-morbidities are the presence of additional medical conditions that further complicate the treatment of the patients and reflect a higher severity of illness index. We are a hospital that honors the NO CODE/DO NOT RESUSCITATE requests of family members.

The HCFA Mortality rates alone do not constitute an appropriate measure of quality of care and is, in fact, a statistical review of number of cases. Bi-County Community Hospital has an ongoing Quality Assessment program which includes mortality review of all clinical departments. All cases in which death occurs undergo internal peer review for appropriateness and quality of care. Because of our strong commitment to quality, Bi-County Community Hospital has secured the services of nationally recognized consultants in the Quality Assessment area to further enhance our present quality assessment and peer review functions.

Sincerely,

Gary W. Popiel  
Vice President/Administrator

gwp/LMC/jmp

13355 East Ten Mile Road  
Warren, Michigan 48089-2065  
313-759-7300

# Blodgett

MEMORIAL MEDICAL CENTER

March 17, 1992

Hospital Provider No: 2300032

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187

Dear Dr. Wilensky:

Thank you for the opportunity to review and comment on the 1990 Medicare Mortality Rates for our hospital.

## HOSPITAL CHARACTERISTICS

Blodgett is a community teaching hospital located in Western Michigan. The hospital is licensed for 410 acute care beds - 285 adult med/surg, 44 adult critical care, 44 obstetrical, and 37 pediatric. A significant portion of our admissions come from outside our primary market area. These referrals are primarily patients with cardiovascular, neurological or orthopedic diseases and disorders. Due to the number of subspecialty physicians and the number of patient referrals from other communities, the mix of patients treated at Blodgett is more complex in nature than the national average. HCFA's Case Mix Index (CMI) confirms this. The CMI for Blodgett in 1990 (the year that corresponds to the mortality rates) was 1.8177, the highest reported rate in Michigan.

## MORALITY RATE ANALYSIS BY HCFA

The analytical model used by HCFA measures the relationship between death and a select group of patient characteristics. Since not all the significant characteristics which could contribute to death (such as severity of illness) have been measured, the ability to predict the likelihood of death is limited. The analysis can serve as an initial screen to be used by medical peer review groups, but can not stand alone as an indicator of quality of patient management.

The initial screen for 1990 for Blodgett indicates an overall rate of 9.2 and a HCFA predicted rate of 7.7. Our first step in evaluating this information was to determine the accuracy of the patient data by reviewing the medical records of the deaths in three subgroups whose rate exceeded the predicted rate by at least one standard deviation: Congestive Heart Failure (CHF), Coronary Artery Bypass Grafts (CABG), and Cholecystectomies. We discovered the following:

1. 11 of the 28 (39%) CHF deaths within 30 days had errors in the primary diagnosis which resulted in classifying them into the wrong subgroup. The correct diagnosis was either myocardial infarction, pneumonia, or major arrhythmias. This would change the mortality rate for CHF to 13.6 (as opposed to 23.2) bringing it below the predicted rate.





Gail R. Wilensky, Ph.D., Administration  
March 17, 1992  
page 2.

2. 4 of the 28 (14%) CHF deaths had significant chronic conditions which were not coded. This resulted in underestimating their risk of death and thereby understating the predicted death rate.
3. 27 of 52 (52%) deaths in all three subgroups (CHF, CABG and cholecystectomies) had significant chronic conditions which were not considered in the analysis because HCFA only looks at the first five diagnosis codes. Complex patients can have up to 25 diagnosis codes. Utilizing only the first five diagnosis codes results in under estimation of the predicted death rate.
4. 5 of 17 (29%) CABG deaths had coronary artery bypass graft performed as a secondary procedure. The primary procedures were either thoracic aneurysm repair or mitral/aortic valve repair/replacement. It is not appropriate to include these in an analysis of CABG death rates. Our internal statistics indicate a 2.7 rate for CABG alone.
5. It was noted that the following conditions are not on the comorbidity list: cardiomyopathy, mitral valve and aortic valve disease. Our hospital manages heart transplant patients who reside in Western Michigan as an outreach program for the University of Michigan. Cardiomyopathy is a frequent secondary diagnosis on these patients who certainly are high risk.
6. 3 of 7 (43%) deaths in the cholecystectomy subgroup had other major, more significant procedures performed such as bowel resections. Therefore, these do not truly belong in this subgroup.

Due to the short time provided for assessing the data, we can provide feedback on a review of only a limited number of records. After completing a review of data accuracy, the information will be forwarded for peer review by our physicians.

#### HOSPITAL USE OF DATA

Blodgett has an ongoing quality assurance program which continually assesses the quality and appropriateness of patient care and takes action whenever opportunities to improve that care are identified. Mortality rates are one of the many aspects of patient care that are monitored. Data from external sources is welcomed and is integrated into our internal data systems for review by the medical staff.

Blodgett's Board of Trustees, Medical Staff and Administration remain committed to continually assessing and improving it's services to the Medicare population as well as all other patients who seek medical care at our institution.

Sincerely,



Terrence O'Rourke, President

/blm





**botsford  
general  
hospital**

28050 Grand River  
Farmington Hills, MI 48336-5933  
(313) 471-8000

MEDICARE PROVIDER NUMBER: 230151

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

RE: COMMENTS ON THE HEALTH CARE FINANCING  
ADMINISTRATION MORTALITY DATA

Dear Dr. Wilensky:

The 1992 release of HCFA Hospital Mortality Data for the the fiscal year 1990, has been reviewed by Botsford General Hospital utilizing the methods described by HCFA.

For the period, October 1, 1989 through September 30, 1990, the observed mortality rates for all causes combined and for each diagnostic and procedural category fell within a statistically acceptable range (calculated at the 95% confidence interval). This experience was noted at both the 30 and 90 day intervals.

Botsford General Hospital, as in previous years, offers comments describing characteristics of our Medicare patient population that contribute to a higher overall mortality risk. These characteristics may not be fully appreciated in the analysis conducted by HCFA.

#### Patient Age

The average patient age of those mortalities occurring during the 1990 study period was 79.5 years. Additionally, 51% of the mortalities that occurred either during hospitalization or following discharge represented patients that were 80 years of age or older.

#### Extended Care Facilities

Of the mortalities that occurred during the 1990 study period, 47% were transferred from an Extended Care Facility (ECF). Based upon previous analyses of mortalities that occurred following discharge, 70% were transferred from and discharged to an ECF. The data suggests a higher predicted risk of mortality due to the compromised health status of elderly patients requiring extended health care services.

Emergency Admissions

Of the Medicare mortalities for the 1990 study period that occurred during hospitalization, 94.7% were emergency admissions to our hospital. The remaining admissions were classified as urgent. These patients required aggressive medical and surgical care for serious and potentially life threatening conditions. This experience reflects a higher than average mortality risk in this patient population.

Terminal Illness

Of the mortalities for the 1990 study period occurring during hospitalization, a high percentage were noted to have terminal illnesses as reflected by patient and family requests that no resuscitative measures be instituted. Of the mortalities that occurred during hospitalization, 92.8% included such a request. A similar experience is noted of those mortalities that occurred following discharge.

Comorbidities

Analysis of Medicare mortality data for our institution has demonstrated a high rate of comorbid conditions - a factor contributing to a higher than average severity of illness. On average, each of these patients had 4.0 comorbid conditions in addition to their principle illness. These comorbid conditions increased the mortality risk during and immediately following hospitalization.

Summary

Analysis of the 1990 HCFA mortality data for our hospital is encouraging, although limitations in the analytic methods are noted. Additional refinements are necessary before clear correlations can be made regarding the quality of care delivered by health care providers and mortality data. Severity of illness characteristics of our Medicare population contributing to an increased overall mortality risk are not fully recognized in the methodology.

The HCFA mortality data will be used as a supplemental measure in the dedicated efforts of Botsford General Hospital to provide the best health care services possible. These efforts are consistent with the mission of the hospital and the comprehensive peer review activities that have been established to continuously improve the quality of health care services that are provided. These peer review activities include a review of all mortalities that occur within the hospital. This process provides the greatest assurance that the quality of care objectives of the hospital are achieved.

Sincerely,



Edward Barter  
Vice President, Administration



Methodist Hospital

Hospital Medicare Provider 230017  
Response to 1990 HCFA Mortality Data

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Dr. Wilensky:

Bronson Methodist Hospital has received and initially reviewed mortality data for Medicare patients whom HCFA reported died within 180 days post admission to Bronson in 1990.


Our preliminary review has concentrated upon the 225 patients whom HCFA reported died within the hospital. We have determined some inconsistencies between the information provided by HCFA and the actual patient occurrence, specifically involving 10 patients whom, according to our records, should not have been included in this set of data.

While Bronson does not regard mortality figures as a sole indicator of quality, we do believe in reviewing any significant trends or patterns arising from the HCFA data. As an institution dedicated to providing quality patient care, Bronson is undertaking an extensive internal and external review of potential areas of concern. This includes, but is not limited to, incorporation of the data into our quality assurance process, which encompasses a concurrent review and action plan process by the appropriate hospital and medical staff representatives.

In general, we continue to be concerned about the hospital's ability to impact mortality at 90 and 180 days post admission. Additionally, while we appreciate the attempt this year to severity adjust data, we feel that the HCFA method needs much refinement. It is inconsistent with other more sophisticated systems, which show a generally higher acuity level for patients admitted to Bronson, consistent with our role as a tertiary care center.

Finally, in correcting the hospital characteristics section of the 1990 data, please note that in addition to the four intensive care units included in the HCFA information, Bronson also has licensed pediatric and neonatal intensive care units.

Sincerely,

  
Richard J. Briscoe  
Executive Director

252 East Lovell Street  
Kalamazoo, Michigan 49007-1118





# Detroit Osteopathic Hospital

AN AFFILIATE OF HORIZON HEALTH SYSTEMS

MEDICARE PROVIDER  
#230150

For 70 years .  
A tradition of caring.

March 17, 1992

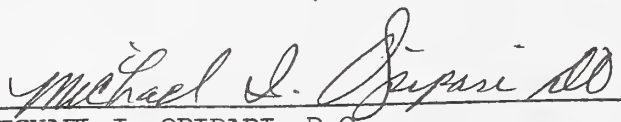
Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTENTION: Robert Moore

STATEMENT PREPARED BY: DETROIT OSTEOPATHIC HOSPITAL  
MEDICARE PROVIDER #230150

IN RESPONSE TO: MEDICARE HOSPITAL INFORMATION - 1992

In 1991, we found that our mortality statistics were adversely impacted by assignment of an admission source code that did not accurately reflect an ECF admission. This was corrected in mid-year 1991, but the 1990 statistics still reflect the undercount of ECF patients. This impacted the predicted mortality rate by keeping the higher risk ECF patients from being counted properly in the HCFA statistics. Transfers from extended care facilities were 23% rather than the 11.6% figure found in the HCFA report.

  
MICHAEL I. OIPARI, D.O.  
VICE PRESIDENT/CHIEF MEDICAL OFFICER/  
ACTING ADMINISTRATOR  
DETROIT OSTEOPATHIC HOSPITAL

MIO/js

12523 Third Avenue  
Highland Park, Michigan 48203-3294  
313-252-4000



DETROIT RECEIVING HOSPITAL AND  
UNIVERSITY HEALTH CENTER  
4201 ST. ANTOINE  
DETROIT, MICHIGAN 48201

HOSPITAL MEDICARE I.D.# 230273

March 19, 1992

Gail R. Wilensky, Ph.D.  
Administrator  
HEALTH CARE FINANCING ADMINISTRATION  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTENTION: Robert Moore

Dear Dr. Wilensky:

We appreciate the opportunity to review and respond to the 1990 Medicare mortality data.

Detroit Receiving Hospital and University Health Center is a 340-bed emergency/trauma hospital and a subsidiary of The Detroit Medical Center, located in mid-town Detroit. Over ninety-five percent of our patients are admitted via the Emergency Department. As a specialty hospital, approximately thirty percent of our beds are categorized for intensive care and intensive care step-down of various types. We have a Burn Center, a Spinal cord Injury Unit, Coronary Care, Surgical Intensive Care, Medical Intensive Care, Pulmonary Special Care, and a Traumatic Brain Injury Unit, in addition to a full complement of medical and surgical acute care beds.

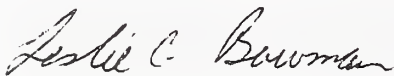
Detroit Receiving is, therefore, an institution which provides tertiary care for the most serious illnesses and injuries. The community's emergency medical transport system relies on our availability. Hospitals and nursing homes transfer to us patient whose conditions require care beyond the expertise of acute and long term care community facilities.

Dr. Wilensky  
March 19, 1992  
Page 2

We note that our observed mortality rates for "All Causes" fall within the predicted range for deaths within 30, 60, and 180 days of admission. Our observed mortality rate for reach specific diagnosis is within the predicted range.

Thank you for giving us the opportunity to comment on the data. As always, we will use the information as an integral part of our quality assurance activities.

Sincerely,

A handwritten signature in cursive script that reads "Leslie C. Bowman".

Leslie C. Bowman  
Executive Vice President

/dh



# FOH

MEDICARE PROVIDER 23-0197

*Matthew J. Welss, D.O., M.P.H.  
Vice President, Geriatric Services  
(313) 762-4236*

March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187

Thank you for the opportunity to respond to the 1990 Medicare Hospital Mortality Information. Flint Osteopathic Hospital is a 359 bed, private, non-profit full service hospital.

The all-cause mortality rate in 1990 for patients who died within 30 days of hospital discharge is significantly lower than 1989 (8.5 versus 9.8) and the same as 1988 (8.5). All cause mortality data for 90 and 180 days was lower in 1990 than in both 1989 and 1988. Once again some discrepancies were found to exist between the mortality cases as reported by HICFA and those reported in our management information system, but these do not appear to be significant.


Upon review of inpatient Medicare mortality, 74% of the total number of patient deaths within 30 days of discharge had an Advance Directive that restricted the institution of cardiopulmonary resuscitation or other means of artificial life support. This is an increase from 1988 (71% of patients) but a decrease from 1989 (83% of patients). Of the total number of patients who died during hospitalization 87% had orders written that prohibited the use of cardiopulmonary resuscitation or artificial life support at the time of their death. This is a slight decrease from 91% in 1989. The limited response deadline precluded evaluation of patients who died at the 90 and 180 day intervals, and analyzing the data by medical condition, procedures, site of entry and site of discharge.

Nineteen ninety-one was an important year for the passage of legislation at both the federal and state level, guaranteeing patient autonomy and patient rights in medical decision making. The mortality data from 1990 preceded these legislative enactments but increasing public awareness and greater participation by patients and their families is evident in this data.

As we noted in last years commentary the limitation of outcome measures as a sole indicator of quality can be misleading. The probability of mortality equals one. The application of a time frame as an indicator of quality of health care, while excluding process and structure, limits the full meaning of this data. The goal of the United States health care delivery system is to provide optimal care for all of our citizens. The development of better measurement tools in conjunction with a restructuring of our health care delivery system will assist in achieving this outcome.

Flint Osteopathic Hospital continues to maintain the highest standards of quality assurance through it's institution review committee, bio-ethics committee and state PRO organizations. This ongoing process along with portions of the hospital mortality data will allow us to continually address the issues of quality of care and maintain as high a standard as possible.

Sincerely,

A handwritten signature in dark ink, appearing to read "Matthew J. Weiss", is written over a horizontal line.

Matthew J. Weiss, D.O., M.P.H.  
Geriatric Services

/RR





GARY R. LEY  
PRESIDENT AND  
CHIEF EXECUTIVE OFFICER

6245 N. INKSTER ROAD • GARDEN CITY, MICHIGAN 48135 • (313) 458-4421

Medicare Provider  
No. 23-0244

March 19, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Re: Fiscal Year 1990  
Hospital Mortality Rates

Dear Ms. Wilensky:

Garden City Hospital's staff has initially reviewed the 1990 Medicare Hospital Mortality Rates. The Hospital has always utilized this information as part of its ongoing peer review and mortality review process to ascertain areas for improvement in patient care. In the short time that the Hospital has had to review the 1990 data, we have serious concerns about the validity of this report and the ability to utilize this information in a meaningful way.

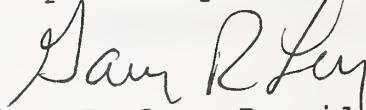
Specifically there are two area of concern.

1. Over the past several years of reviewing these reports, the Hospital has seen the predictive values developed through the HCFA methodology vary on a year-to-year basis by almost 60% in some specific disease categories. Given the Hospital's knowledge of a relatively stable patient base with relatively stable patient characteristics, it seems that any methodology that allows for such a variation on a year-to-year basis raises serious questions as to the usefulness of this data. The Hospital would request assistance from the staff at HCFA to clarify how predicted ranges can vary by so much within small categories.

2. The "1990 Values for Selected Explanatory Factors" used to predict mortality rates appear to be incorrect in some specific categories. To the degree that they impact the determination of predicted rates again makes the usefulness of using predicted values questionable. Specifically, at Garden City Hospital, it indicates a value of 0% admission were from skilled nursing facilities. This is an incorrect percentage. It is unclear why this has occurred, but clearly this would have an impact on the predicted rates as well as indications of the severity of the patients receiving treatment at the Hospital.

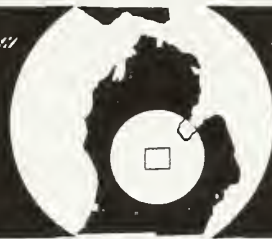
Garden City Hospital's Medical Staff continues to have an active quality assurance peer review process that includes among other factors a review of its mortality statistics. Due to the issues raised in this letter, the validity and value of the predicted ranges are in serious question. The Hospital encourages HCFA to take steps to allow for verification of the input data within a time frame that could allow for correction of the data prior to publishing.

Respectfully submitted,



Gary R. Ley, President  
& Chief Executive Officer  
Garden City Osteopathic Hospital

GRL:bab  
5911b



*A Community of Service*

March 18, 1992

HOSPITAL ID: 230030

Gail R. Wilensky, Ph.D, Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

Attention: Robert Moore

Dear Mr. Moore:

Gratiot Community Hospital fully supports HCFA's concepts and intentions to aid in establishing quality measurements for all hospitals. However, we continue to believe that the methodology used by HCFA still does not provide a reliable guide to consumers in evaluating their healthcare provider.

HCFA's analysis assumes that a patient's outcome is the result of both hospital treatment and the health status of the patient. By measuring outcome (death) 30, 90 and 180 days after admission, HCFA believes its analysis infers something about the quality of hospital care.

A recent review of the HCFA sample of Medicare patients used in the analysis found that patient mix data which was not available to HCFA could have made a considerable difference in the expected mortality rate for Gratiot Community Hospital.

In response to Gratiot Community Hospital's deviation from expected rates as released by HCFA, the hospital states:

- we are neighbors to residents of a 450-bed major retirement and nursing home facility (Michigan Masonic Home) which receives patients from across the state and the nation. Many of these patients are normally of a health status at high risk for illness and complications.
- since many of our patients do expire 30, 90 and 180 days after leaving the hospital due to chronic conditions, the data is not an accurate indicator of care received at Gratiot Community Hospital.
- Gratiot Community Hospital is a federally-designated Rural Referral Center and therefore renders complex medical care with a high percentage of physician specialists on staff.

- Gratiot Community Hospital operates a Renal Dialysis Center and receives patients from a 13-county area for treatment. Many of these patients are high risk patients. A large proportion of these dialysis patients are over age 60, and present several co-morbidities and complications.

Gratiot Community Hospital does not believe the current HCFA methodology accurately reflects the quality of care provided by our organization. Gratiot Community Hospital has been accredited by the Michigan Department of Public Health and the Joint Commission on Accreditation of Healthcare Organizations since its establishment in 1955. In 1991, as well as in many previous years, we were highly commended by our regulatory inspectors for providing quality medical care throughout the organization.

Gratiot Community Hospital, and its Medical Staff, applaud the efforts of the Health Care Financing Administration to join with the entire healthcare industry in an attempt to assess and improve patient care. We challenge HCFA, however, to continue to revise your methodology to more accurately reflect quality of care. The consumer deserves to know about quality, but the information needs to be an accurate reflection which will assist them in making a fully informed decision about their health care provider.

Sincerely,



Bob M. Baker  
President  
Gratiot Community Hospital

BMB/sm





3990 John R  
Detroit, Michigan 48201

Provider Number:  
230104

HEALTH CARE FINANCING ADMINISTRATION

MORTALITY DATA RESPONSE

1990 DATA

In reviewing our 1990 mortality data for Harper Hospital, we believe that our favorable data reflects our ongoing commitment to providing quality healthcare in a urban environment, which is demonstrated by the complexity of our patient case mix.

On an overall basis our observed mortality is less than predicted in most instances. Our data rarely exceeds the predicted mortality, except where the case volume is too low to meaningfully interpret the variation between the observed and predicted mortality. In these few instances, resulting from the low number of cases included in the data, only one death in a category can exceed the predicted mortality.

Concerning our 1990 data, we feel our efforts to reduce length of stay while providing quality patient care with favorable outcomes is moving in a positive direction. While mortality is only one of the many components that should be considered when evaluating a facility, we believe our dedication to programs in continuous quality improvement and resource consumption have assisted us in blending concerns for providing quality care in a cost conscious healthcare environment.

  
Paul L. Broughton  
President



## HAYES GREEN BEACH MEMORIAL HOSPITAL

321 EAST HARRIS STREET, CHARLOTTE, MICHIGAN 48813 PHONE: (517) 543-1050

MEDICARE PROVIDER NO. 230006

The following information is being submitted to clarify those categories in which the observed mortality rates exceeds the mortality model's predicted rates for Hayes Green Beach Memorial Hospital.

### Chronic Obstructive Pulmonary Disease

2 expired patients out of 11 cases were included in this category.

- 1 expired within 48 hrs. of admission
- 1 expired after 180 days with a cardiopulmonary arrest

### Hip fractures with Open Reduction\*

2 expired patients out of 13 cases were included in this category. Both patients were admitted after falling at a skilled Nursing Facility and a Adult Foster Care home. Ages were 82 and 95, and both had "do not resuscitate" orders.

### Sepsis

4 expired patients out of 7 cases were included in this category.

- 2 patients expired 30 days post discharge to skilled nursing facilities
- 1 patient expired within 30 days of being discharged to another acute care facility
- 1 patient expired at HGB and had a "do not resuscitate" order, age 92.

### Congestive Heart Failure

6 expired patients out of 23 cases were included in this category.

- 4 patients had "do not resuscitate" orders.
- 3 patients expired at HGB, 2 "do not resuscitate."
- 1 patient expired 4 days post discharge to a SNF, "do not resuscitate."
- 1 patient expired 6 months post discharge.
- 1 patient expired 8 months post discharge with an acute M.I., "do not resuscitate."

### Additional Information

#### Age Grouping:

|        |    |                                   |
|--------|----|-----------------------------------|
| 61-69  | 7  | "Do not resuscitate" orders       |
| 70-75  | 6  | 48.5% of the expired patients     |
| 76-80  | 7  | listed under the "conditions"     |
| 81-85  | 17 | category had "do not resuscitate" |
| 86-90  | 10 | orders.                           |
| 91-95  | 8  |                                   |
| 96-100 | 2  |                                   |
| Total  | 57 | Average Age: 83.1 Years           |

\*13 patients had hip fractures, 11 had open reductions, 1 had a hip replacement, and 1 was treated medically.

Lapeer  
Regional  
Hospital



March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management & Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5137

Attn: Robert Moore

Re: Comment on the 1990 HCFA Mortality Data  
Provider # 230193

Comments:

Lapeer Regional Hospital has reviewed the recent release of the 1990 Mortality Data. As in the four previous releases, the data provided by HCFA does not entirely correlate with the mortality files at L.R.H. However, we acknowledge the usefulness of the data in helping the Quality Assurance Committee identify areas for additional attention for improving patient care. Based upon our analysis of the observed mortality rate and the standard deviation for each category, L.R.H. mortalities do not significantly deviate from the predicted rate. As stated in the previous responses to the mortality data for 1986, 1987, 1988 and 1989, L.R.H. is a sole community acute care facility that is strategically positioned such that it serves many from surrounding rural areas. We are responsible for providing a continuum of care from birth to death for patients of all ages, economic and social class, and with all diagnoses with any prognosis.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stan W. Jonas".

Stan W. Jonas  
President & CEO

SJ/ml



March 19, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTENTION: Robert Moore

We are in receipt of the data provided us relative to Medicare mortality and are responding to the same. Our review has yielded the following conclusions:

I. Category C3, Pneumonia:

In sixteen cases, patients were 75 years of age or older, and of these, three were over the age of 90. The average length of time from discharge until death was 49 days. Five patients died in skilled care/nursing home facilities. It is unknown where four of the patients died. Numerous patients had severe complicating conditions other than the diagnosis of pneumonia. The following causes of death were noted:

- a. One case of end stage cardiopulmonary disease and respiratory failure.
- b. One case of chronic lymphocytic leukemis and septicemia.
- c. In one case, the individual was brought to the emergency room in full arrest.
- d. One case of recurrent astrocytoma.
- e. One case of chronic renal failure and aortic stenosis.
- f. Two cases of cardiopulmonary arrest.
- g. One case of arteriosclerotic heart disease.
- h. One case of adrenal carcinoma with metastasis.

There were only two cases in the study that actually had the cause of death attributed to pneumonia.

II. Category C2, Congestive Heart Failure:

In nineteen of the cases, the patients analyzed were 75 years of age or older. Five patients were over the age of 90. The average length of time from discharge from the hospital till date of death was 50 days.



Page 2  
March 19, 1992  
Gail R. Wilensky, Ph.D.

Seven of the patients died in nursing home facilities. It is unknown where five patients died. Patients reviewed had many complicating conditions other than a diagnosis of congestive heart failure. The following causes of death were noted:

- a. One case of renal cell carcinoma with metastasis.
- b. Two cases of acute pulmonary edema.
- c. One case of end stage cardiac disease.
- d. One case of acute myocardial infarction, pulmonary edema and respiratory failure.
- e. One case of end stage congestive heart failure.
- f. Three cases of cardiac arrest.
- g. Two individuals came into the emergency room in full arrest.
- h. One case of renal failure and multiple system failure.

Four of the cases reviewed in this study had the cause of death attributed to congestive heart failure and one of these cases was complicated by pneumonia.

### III. Category C8, Sepsis:

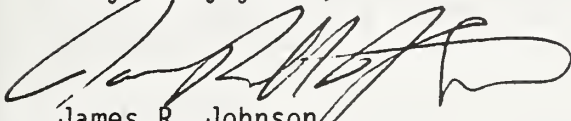
Three of the cases were listed as having the cause of death of sepsis. It is important to note that in these three cases the patients were admitted with this condition. These individuals came into the hospital extremely ill and had severe complicating conditions such as respiratory distress and heart problems. All three patients were over the age of 80.

### IV. Category P8, Cholecystectomy:

In three cases, individuals died following cholecystectomy. One of these cases had been discharged to a long term care unit and died in that care center at the age of 78. This patient had been found to have a cholangiocarcinoma at the time of surgery. One patient died of cardiopulmonary arrest and one case developed acute respiratory failure and myocardial infarction.

A methodology which views the mortality rate wherein the only major variable is length of time from date of discharge to date of death is logically flawed. Furthermore, using the primary admission diagnosis as a category for analysis is meaningless when the cause of death following discharge is completely unrelated.

Very truly yours,



James R. Johnson  
Chief Operating Officer and  
General Counsel

JRJ/amt



March 19, 1992

Mercy Memorial Hospital  
740 North Macomb Street  
P.O. Box 67  
Monroe, Michigan 48161  
Telephone — 313-241-1700  
Fax — 313-241-0032

Medicare Provider #230099

Gail R. Wilensky, Ph. D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Mr. Moore:

This letter contains comments from Mercy Memorial Hospital regarding the data to be presented in the publication, Medicare Hospital Information - 1992. These comments were developed following a comprehensive review of the data as part of the hospital's continuous efforts to improve patient care.

At first glance, the data appear to reveal a significant difference between the observed and predicted mortality rates for Initial Pacemaker Insertion and Prostatectomy at 90 and 180 days after discharge. Upon further review of each patient's care, we found the patients were treated appropriately and their deaths were due to factors other than the performance of the procedure. In each case, the procedure was necessary as evidenced by conformance with criteria from Medicare or other national organizations which indicate when surgery is needed.

It appears the data may have misrepresented the relationship between the performance of the operation and the patient's death. In supplemental information provided by HCFA, it is indicated that the "precision" and "interpretability" of the predicted mortality rates are "questionable" when dashes, "---", are present in the standard deviation column. This occurs when there are less than 50 cases in a category, as is the case with the pacemaker and prostatectomy procedures. Due to the uncertainty of the predicted mortality rate, the difference between the observed and predicted mortality rates is not meaningful. Our analysis supports this conclusion, since none of the patients who had a pacemaker insertion or prostatectomy procedure died as a result of surgical intervention.

Mercy Memorial Hospital and its medical staff are committed to continuously assessing and improving the quality of patient care provided to the community. The Medicare Hospital Mortality Rate data gives us an opportunity to evaluate our care. We recognize that this data alone cannot provide us with a complete picture of the quality of care we offer, so we will continue to use it as one part of our continuous quality improvement effort.

Sincerely,

*Richard S. Hiltz /rc*

Richard S. Hiltz  
President and Chief Executive Officer



METROPOLITAN  
HOSPITAL

P.O. BOX 158  
GRAND RAPIDS MICHIGAN 49501-0158  
(616) 247-7200

March 17, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
Attention: Robert Moore

Dear Mr. Moore:

RE: Hospital ID# 230236

Thank you for this opportunity to preview and comment on the mortality information for Medicare beneficiaries hospitalized at our facility during FY 1990. While the principal changes made in the 1992 report make this information more useful to hospitals, it is unfortunate that comparative explanatory data for FY88 and FY89 were not included. This information would have been helpful to identify patterns or trends that impact the mortality rates at acute care facilities.

Metropolitan Hospital utilizes the Medicare Hospital Mortality Rates report to analyze and evaluate the quality of care and appropriateness of services provided. The data in this report helps us to identify patterns of greater than expected mortality, or changes in patterns over time. A clinical peer review occurs when a pattern or trend is identified. However, due to the time constraints imposed by HCFA, this process could not be completed in the time allowed to submit a response that could be published with our rates.

The graphic presentation of predicted and observed mortality rates for "all causes", FY88-90 at 30, 90 and 180 days is misleading. The observed mortality rates in FY89 had decreased significantly when compared to FY88. The observed mortality rate for FY90 increased in comparison to FY89. This increase is only minimal however, when compared to FY88 rates. Although the observed mortality rates for some conditions in FY90 have seen an increase in the percentage; the volume of cases is not large enough to be considered statistically significant. As an example, in those cases dealing with hip replacements, the average age is 88 years, which is significantly higher than the average age of 74.4 years noted in your report. Age is a contributing factor that impacts the overall outcome. It is also significant to note that 75 percent of these patients resided at an extended care facility.

In comparing the actual and predicted rates, the observed mortality rate lies within the bounds calculated for the 99 percent prediction interval. We feel that the difference between our observed and predicted mortality rates, at the 95 percent confidence level, is most likely due to random variation.

In May 1990, Metropolitan Hospital began a venture with a local extended care facility, the Michigan Veterans Facility. The residents of this facility have very complex multi-system medical conditions which has a direct bearing on their prognosis. Five percent of the reported mortalities in your report represent patients from this facility. Indeed 24 percent of admission from the Michigan Veterans Facility expired at the hospital. It is important to note this

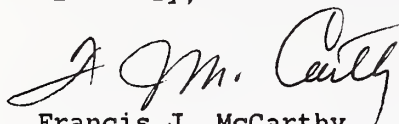


RE: Hospital ID# 230236

information since individual patient characteristics have a large impact on the expected mortality rate, as well as the availability and quality of care provided by nursing homes and home health care agencies in the community.

Metropolitan Hospital is committed to continuous quality improvement and welcomes this opportunity to incorporate the Medicare Hospital Mortality Rates into our internal review process and make those changes necessary to improve the patient care we provide.

Sincerely,

A handwritten signature in cursive script, appearing to read "F. J. McCarthy".

Francis J. McCarthy  
President





1000 Harrington Boulevard  
Mount Clemens, Michigan 48043  
Telephone (313) 466-8000

MOUNT CLEMENS GENERAL HOSPITAL

Medicare Provider Number: 230227  
March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Madam/Sir:

We are in receipt of the data for Mount Clemens General Hospital, which you so kindly supplied to us, pertaining to mortality data for your fiscal year 1990. We were very favorably impressed with the volume of data and particularly with the information that pertains to the manner in which the data is obtained, calculated and interpreted by your office. We appreciate the opportunity to review this data and to comment upon it as you have suggested. Our comments are as follows:

1. It would be most helpful if the data could be received earlier than two weeks before the deadline for compiling a reply or comments. This is particularly true in attempting to track down the patients who died at facilities other than our own.
2. In that context, it would appear to us that since you are able to determine the ultimate fate of each of these patients by their final UB-82 Form and/or information obtained from the Social Security Administration pertaining to their death, that you should be able to determine the ultimate cause of death, where it occurred and whether or not the final events were in any way related to the diagnosis used in compiling the mortality data that you have supplied.
3. We are concerned about the use of the DRG as the principle diagnosis. In many of our cases that diagnosis was not related to the events leading to the patient's ultimate death. Therefore, it seems to us that such data is really not valid.
4. We are also puzzled as to the exact purpose for which this data is compiled, published and distributed to the public. If it is to suggest a measure of the adequacy or appropriateness of treatment rendered to patients with specific diagnoses, then it is totally misleading and in fact constitutes misinformation. That is to say, for example, if a patient undergoes an elective cholecystectomy, has an uncomplicated recovery and is dismissed without incident, but two months later is hit by a truck and killed that patient shows up in your data as a death associated with cholecystectomy since that is the last DRG under which you compiled your data. This may be an extreme example but it is used simply to try to make a point.
5. If appropriateness of treatment and quality of care are the issues of which the public should be aware, then the end product of peer review, i.e. PRO review, should be the data base source for the calculations related to mortality associated with specific diseases or procedures.
6. In reviewing the data supplied to us we have found a number of situations wherein we would be concerned about the validity of the data. For example:



Medicare Provider Number: 230227

- A. An 80 year old female was seen here and underwent an emergency cholecystectomy for acute cholecystitis. She died 250 days later from a stroke . We believe this case should be eliminated from the data for two reasons, first that her death had nothing whatever to do with her cholecystectomy, and second that the interval of 250 days after discharge from her cholecystectomy exceeds the 180 day time table you have set for predicting mortalities.
  - B. Similarly, a 75 year old female who had a fractured hip, had her hip repaired by open reduction and internal fixation, had a perfectly normal recovery from her hip surgery but on the fifth day following her surgery she developed a mechanical bowel obstruction and eventually had four different bowel procedures performed and died of the result of the complications of her bowel surgery and not her hip fracture.
  - C. In your totals for patients who expired after undergoing open reduction and internal fixation of hip fractures you have included one patient who did not have this operation done, but had her hip replaced and therefore should not be included in your procedure category P6.
7. The following is a list of data related to the time period after discharge from this hospital and the ultimate date of death.
- A. There were 13 patients who died more than 180 days after discharge who should be eliminated from the data base.

*In summary, we are anxious to cooperate in your mortality studies and we agree that this information should be made available to the public. But we do find difficulty in determining how this data will be interpreted by the public since it really does not appear to reflect on the quality of care which is what the public needs to know in attempting to make choices relative to individual physicians and/or hospital facilities.*

*We are submitting individual case numbers from the data you have supplied with comments appropriate to each case, **NOT FOR PUBLICATION.***

*Again, we thank you for the opportunity to comment upon this data and to make suggestions and comments which we hope you will find useful in continuing to improve your data collection and its interpretation.*

*Sincerely,*

*Susan Edwards*

Susan Edwards  
Chief Operating Officer

SE/JP/LEH/nw

Attachment: (1) NOT FOR PUBLICATION



Northern Michigan  
Hospital

*Committed to Intensive Caring*

Medicare Provider Number: 230105

March 18, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, MD 21207-5187  
Attn: Robert Moore

Dear Dr. Wilensky:

Northern Michigan Hospital appreciates the opportunity to comment on our fiscal year 1990 Medicare hospital mortality rates.

The Northern Michigan Hospital (NMH) statistics indicate that our observed mortality rates were below or within one standard deviation of the predicted rate (where a standard deviation is reported) in all condition and procedure categories.

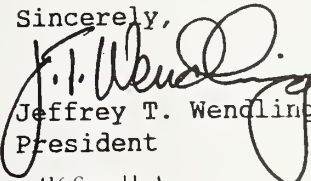
Within the angioplasty group, we are concerned that sampling methods may misrepresent our Hospital's actual angioplasty-related deaths. During fiscal year 1990, 215 coronary angioplasty procedures were performed at NMH; and 41% of these patients were Medicare patients, age 65 years and older. Our overall angioplasty in-hospital mortality rate was 1.3% (n=3), and 3.3% among Medicare patients. We are concerned that the 30, 90, and 180 day mortality rates may not accurately represent angioplasty-related deaths. For example, 2 of the 5 mortalities attributed to angioplasty, occurred here at NMH during a subsequent admission and were not procedure related.

Northern Michigan Hospital will continue to use the mortality statistics as additional data to support our internal quality monitoring activities. For example, the mortality statistics among congestive heart failure (CHF) patients contribute to our current research efforts to understand factors that describe the illness course of these complex, chronically ill patients; and to future research to test methods that improve hospital and post-discharge care.

Northern Michigan Hospital is committed to providing high quality patient care to a large rural community. We are committed to informing our community about the importance of interpreting these statistics within the context of an overall assessment and evaluation of the quality and efficiency of hospital and physician care.

Thank you again for the opportunity to review and comment on these Medicare mortality statistics.

Sincerely,

  
Jeffrey T. Wendling  
President

416 Connable Avenue

Petoskey, Michigan 49770-2297

616-348-4000



# Pontiac Osteopathic Hospital

50 N. PERRY ST. PONTIAC, MI 48342  
313-338-5000

Hospital ID: 230207

March 5, 1992

Gail R. Wilensky, PhD, Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

RE: 1990 HCFA MORTALITY RATES

Dear Mr. Moore,

In response to the Health Care Financing Administration Mortality Rates for FY 1990, Pontiac Osteopathic Hospital issues the following statements:

1. The data prepared by the Health Care Administration for our facility was found to contain numerous errors and inconsistencies when analyzed in depth by our staff.
2. A correlation between the quality of care rendered and mortality can not be made especially for those patients who expired within the 30, 60 or 180 days post-admission. The data released does not represent "true" mortality statistics or cause of death.
3. Medicare patients who expire generally have several co-existing disease entities which contribute to their death, it is not a reflection on the quality of care rendered. The data does not reflect stratified severity of illness indicators such as those developed by Susan Horn, PhD of John Hopkins.
4. The data does not reflect those patients who were admitted and a "no resuscitation" status was requested per the patient or family due to the patient's condition.





1990 HCFA Mortality Rates  
March 5, 1992  
page 2

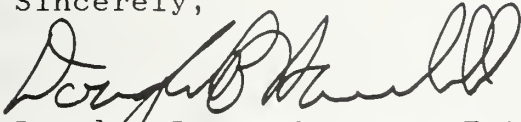
Hospital ID: 230207

5. Pontiac Osteopathic Hospital is a certified "Emergency Trauma Center." We also receive a high number of nursing home patients who when transferred to our facility are in a deteriorating/terminal state.

6. We strongly feel the quality of care rendered to our patients at Pontiac Osteopathic Hospital and others in the health care industry far exceeds any governmental mandated standards.

Thank you for the opportunity to comment on the 1990 HCFA Mortality Rates.

Sincerely,



Douglas B. Hurd, D.O., F.A.C.O.S.  
Medical Director



Belinda Wiegand, RRA  
Director, Clinical Information Services

cc: J. Whitlow, Executive Director  
P. Lamberti, Executive Assistant Administrator  
R. Haener, Director of Finance  
L. Abramson, DO, Director, Quality Assessment  
S. Lucik, Director, Development/Community Relations  
file



Health Care Provider Number: 230216

# P O R T H U R O N H O S P I T A L

*Shaping the dream of a healthier future*

March 19, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

In reviewing the Health Care Financing Administration data for Port Huron Hospital for 1990, we note that in 10 of the 17 categories listed we had fewer than 50 patients in the population. This makes the data in those 10 categories statistically uninterpretable. In two procedure categories 0 population was reflected because angioplasty and coronary artery bypass graft procedures are not services which we provide as this time.

In the remaining five categories our observed mortality rates were very close to the HCFA predicted rates. Using a 95 percent confidence level the observed mortality is consistently within the predicted range.

The average patient age in the population was 73.9 years old with 139 (7.7%) of the patients being under 65 years old. Several patients (55) were less than 50 years old.

Mortality data is routinely evaluated by the Medical Staff as part of our efforts to continuously improve services. This specific information will be referred to the appropriate Medical Staff sections for their input.

HCFA data will be analyzed to determine areas for internal hospital improvement. The data last year resulted in the development of a team to analyze and improve hospital processes related to the treatment of Congestive Heart Failure. 227 of the 341 deaths identified by the data died after hospital discharge. Difficulties may, therefore, be encountered in the analysis since a large number of the deaths occurred outside of Port Huron Hospital (67%)

Sincerely,

Donald C. Fletcher, CEO,  
President

DCF/mkp

VHA. Affiliate of Voluntary Hospitals of America, Inc.



Providence Hospital and  
Medical Centers

March 17, 1992

16001 West Nine Mile Road  
P.O. Box 2043  
Southfield, Michigan 48037  
(313) 424-3000

Medicare Provider No. 230019

Gail R. Wilensky, Ph.D.  
Administrator, Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Bldg.  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187

ATTN: Robert Moore

Dear Dr. Wilensky:

We are in receipt of the 1990 annual release of Medicare hospital information specific to Providence Hospital. We concur with the data submitted, however, would like to offer the following comments or points of clarification.

Based on the data reported, our hospital has a higher than predicted mortality for the Pneumonia/Influenza patient condition category. The Providence Medical Staff Quality Assessment process also identified a similar concern and has recently completed a focused review on cases coded DRG Code 89 (Simple Pneumonia/Pleurisy).

The focused review, performed by the head of Infectious Disease, involved detailed evaluation of ten (10) charts from January, 1991 through March, 1991. The results of the review indicated that even though the coding was simplified as "Pneumonia", all the charts had multiple underlying ultimately fatal illnesses which were not primary diagnoses. Four (4) patients had metastatic carcinoma (one of the four had recurrent brain tumor and another had primary cancer of five (5) organs). Four (4) patients had severe terminal cardiac disease with refractory heart failure, arrhythmia along with COPD and nutritional problems. Two (2) patients were elderly nursing home residents and no code status. None had identifiable bacteria on sputum or blood culture. Many received broad spectrum antibiotic coverage which included Pneumococcal and non-Pneumococcal bacterial coverage.

In summary, the final outcome was acceptable in all patients reviewed due to the underlying cancer, refractory heart disease and advancing age. An in-servicing of physician and medical records personnel has been implemented to insure proper coding in the future. A similar focused review is planned for the Prostatectomy



Gail R. Wilensky, Ph.D.  
Medicare Provider No. 230019  
March 17, 1992  
Page Two

procedure, in which your data also shows a higher than predicted mortality rate.

We appreciate the opportunity to comment on our hospital specific data and would be happy to respond to any questions you may have regarding our comments.

Sincerely,

A handwritten signature in dark ink, appearing to read "Brian Connolly", with a long horizontal flourish extending to the right.

Brian Connolly  
President

BC/dw



March 16, 1992

Medicare Provider #230122

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

RE: HCFA Mortality Data

Saginaw General Hospital Comments

The HCFA Mortality Data is useful for identifying differences in mortality among patient populations but does not explain why they are different. The data is not a measure of quality of care.

When reviewing this type of mortality data it is important to keep in mind the limitations of this data. From this data it is impossible to determine the severity of illness of each individual case, or if the patient was suffering from multiple medical problems.

If a death occurred during the patient's hospitalization we cannot determine from these statistics whether the patient requested "no resuscitation or extraordinary procedures". If the death occurred after the hospitalization we are unable to determine what percentage of deaths were in anyway related to the reason the patient was hospitalized.

Another factor affecting a hospital's mortality rate is the type of services available. Regional referral centers treat the more complex, and medically unstable patient, thus potentially increasing the hospital's mortality data. SGH is a referral hospital with a Regional Dialysis Center and a major Oncology Service. We frequently receive referral patients from surrounding hospitals for further management of a complex diagnosis or worsening medical condition.

This report reflects only Medicare patient information which is just a portion of all hospital patients. We feel the report is appropriate for the scope of services we provide.

Sincerely,

  
Donald E. Juenemann  
President and CEO

MAR/dra

A Division of Saginaw General Healthcare Corporation



**SAGINAW  
GENERAL  
HOSPITAL**

1447 N. Harrison  
Saginaw, MI 48602  
517-771-4000

*Caring for  
your family  
for life*

**VHA.**  
Member of  
Voluntary Hospitals  
of America, Inc.



SALINE  
COMMUNITY  
HOSPITAL

400 West Russell, Saline, Michigan 48176

313 429-1500

FAX: 313 429-3408

March 17, 1992

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Hospital Provider Number: 230212

Dear Ms. Wilensky,

Saline Community Hospital has received the statistics compiled by the Health Care Financing Administration related to the mortality rates of Medicare patients. The hospital administration and medical staff appreciate the opportunity to review information which complements our current system of evaluating quality care.

Data review: In reviewing this data, several comments are appropriate.

1. Saline Community Hospital's observed mortality rates for **ALL CAUSES** for years 1988, 1989, and 1990 were within one standard deviation of the predicted rates, suggesting the difference between the observed rates and expected rates is likely to be the result of random variation and, therefore, not likely to be meaningful.

2. The number of cases found under the **CONDITIONS** range from a low of two (2) to a high of thirty-five (35) for all three fiscal years. Based on Health Care Financing Administration's own statement, the precision and interpretability of the estimates are questionable when there are no deaths or fifty (50) or so fewer cases in a particular category being analyzed.

Even though this is the case, a review was undertaken of Fiscal Year 1990 stroke deaths, the category where the observed rate exceeded the predicted rate by the greatest amount for all three time frames. Our initial findings were:

- a) The average age of the stroke patients was 84 which compares to the 75.8 for all patients.
- b) Of the eight (8) patients who died seven (7) were **NO CODE** admissions through the Emergency Department.
- c) Ninety per cent (90%) had two or more comorbid conditions.

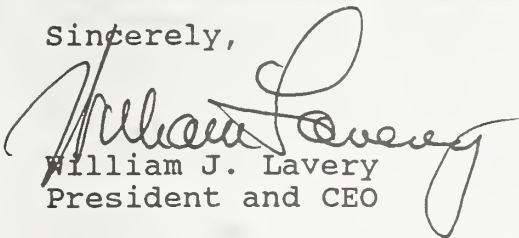
Hospital Provider Number: 230212

These charts, along with the charts from the other conditions where we exceed the predicted levels, will be forwarded to the appropriate medical staff review committee for final analysis regarding the quality of care.

3. The number of cases found under the **PROCEDURES** ranged from four (4) to thirty (30) for all three fiscal years. Based on Health Care Financing Administration's own statement, the precision and interpretability of the estimates are questionable when there are no deaths or 50 or fewer cases in a particular category being analyzed.

Saline Community Hospital views this data as valuable input into our existing quality assurance program. The health care system is being increasingly held accountable for both a high standard of quality and reasonableness of costs. Saline Community Hospital's goal is to be responsible first to the patient while keeping the needs of the payor in mind.

Sincerely,



William J. Lavery  
President and CEO





# Hospital and Medical Center

22101 Moross Road  
Detroit, Michigan 48236-2172  
(313) 343-4000

230165

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Ms. Wilensky:

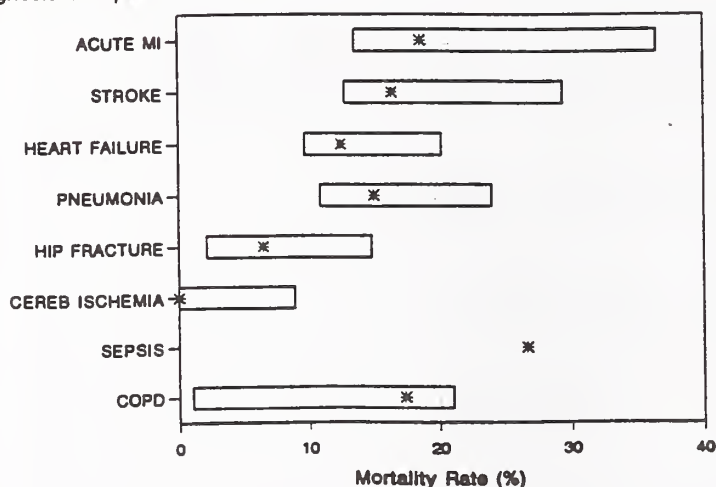
We are grateful for this opportunity to provide constructive input toward your efforts to inform the public of outcome differences among providers of care. These data are helpful to our quality assessment efforts, providing national comparisons to complement our reviews against internal guidelines and rates cited in authoritative scientific literature.

We offer two recommendations: First, publish the ranges of predicted mortality for each category, rather than the mean point values only. As your "Technical Background" materials properly point out, such ranges are essential to meaningfully interpret these data with a reasonable degree of confidence. While you provide the standard deviation as a measure of the uncertainty of the predicted difference in rates, we are doubtful that most readers will readily translate this statistic into the appropriate range. Why not calculate these ranges for the user?

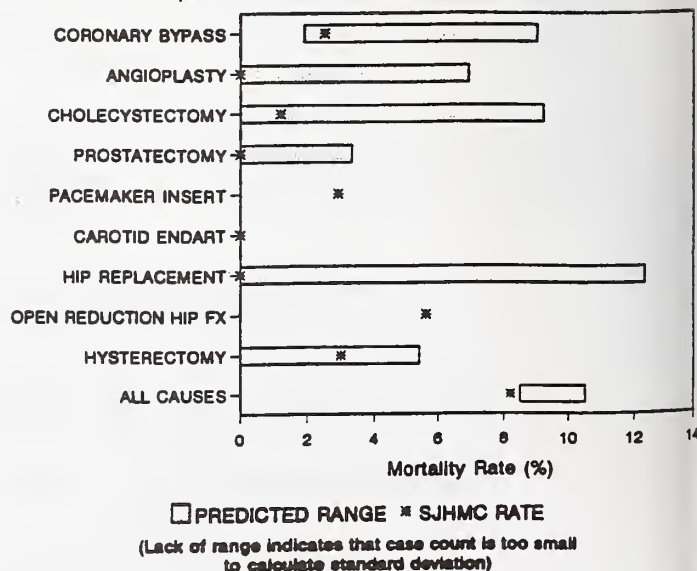
The graphical presentation format you have used to depict the "All Causes" rate is excellent for this purpose. We use a similar format (shown below) to present your results to our Medical Staff Quality Assessment Committees and to our Board of Trustees. In this format, St. John Hospital and Medical Center's mortality experience can be seen to be within predicted range for each category; for "All Causes", it is actually below the lower bound of the predicted range and, therefore, very significant.

Medicare Mortality Rates, 1990  
30 Days Post Admission

## Diagnosis Groups



## Procedure Groups





Second, we recommend you caution readers that the procedures selected are not always performed electively, on stable patients, and for the same indications. Some are conducted in emergency situations where high risks of surgical mortality are weighed against virtually certain death without surgical intervention. Readers consulting this text as a consideration for surgery are not likely to be in the latter situation and may be misled by the data.

For example, one of our mortalities in the "Hysterectomy" category involved emergency surgery to remove an infected tumor which was the source of life-threatening sepsis. The patient came to our facility in debilitated condition, with her cancer in an advanced state, apparently neither previously diagnosed nor treated elsewhere. The very significant surgical risks were acceptable to the patient and family under these circumstances, particularly given that the gynecological subspecialists skilled in this procedure were available at our facility.

The other mortality in this category occurred post-discharge from causes unrelated to the procedure. In prior years, our mortality rate for this procedure has been zero. Again, we would hope readers will be encouraged to seek the counsel of their physicians in using these data for treatment-related decisions.

We are very proud of the quality of care delivered to our patients and are pleased to see this quality borne out by these comparisons. We hope our comments will be helpful to you.

Sincerely,



Glenn A. Wesselmann  
President and  
Chief Executive Officer

Medicare Provider Number: 230156  
St. Joseph Mercy Hospital

Gail R. Wilensky, Ph.D., Administrator  
Health Care Financing Administration  
Medicare Hospital Information  
Bureau of Data Management and Strategy  
Room 3-A-12, Security Office Park Building  
6325 Security Boulevard  
Baltimore, Maryland 21207-5187  
ATTN: Robert Moore

Dear Dr. Wilensky:

We appreciate the opportunity to review and respond to the Medicare Hospital Information - 1992 report soon to be published.

We continue to be supportive of the continuing efforts by the Health Care Financing Administration directed to improve the outcome measurement. Unfortunately, the multitude of variables having influence on death rates still require caution in interpretation. Patient selection and acceptable treatment option election often impact outcomes; technical "quality" is but one of the factors within the equation.

We continue to be encouraged with progress made to improve the information each year.

Yours truly,



F. W. Jeffries, M.D.  
Chief of Staff



Garry Paja  
Executive Vice President & CEO  
St. Joseph Mercy Hospital



*St. Lawrence*

Hospital & Healthcare Services

Medicare Provider Number: 230157

COMMENTS ON THE HCFA MORTALITY DATA  
ST. LAWRENCE HOSPITAL AND HEALTHCARE SERVICES  
LANSING, MICHIGAN  
March 16, 1992

Dear Sirs:

Thank you for providing hospital-specific mortality information. In regard to the HCFA mortality report, we submit the following comments:

1. Two data discrepancies are noted in the HCFA data. The case specific corrections are listed separately, and are listed by HCFA with incorrect dates of death. The correct dates of death have been verified with our records.
2. An ongoing review of mortality cases is conducted through a peer review process, and continues to play an important role in reviewing and maintaining quality of care.

Sincerely,

Arthur Knueppel  
President and Chief Executive Officer

Enc.



# Standish Community Hospital

and

## Skilled Nursing Facility

P.O. Box 579 • 805 W. Cedar • Standish, MI 48658  
(517) 846-4521

March 16, 1992

Dear Dr. Wilensky,

After reviewing the data you have provided on this institution, I can find only one case that I would question. It is the case of an 83 year old female with a fractured hip. While this person initially sought medical care at our facility, it was felt that this patient required an orthopedic physician that is not available here. The patient was transferred to another facility within twenty-four (24) hours of admission. This same patient was subsequently re admitted to this facility approximately one month later to be treated for Azotemia, Dehydration, and Status Post Cerebral Vascular Accident. The patient expired during the second admission.

Due to the fact that the Fractured Hip was not repaired/reduced at this facility and the patient was transferred elsewhere for that care, I am also concerned that this patient may appear on the data for both hospitals. It is hoped that this is not the case, and that the patient data would reflect on the hospital where the actual treatment for the condition was delivered and not the referring hospitals.

Thank you for your time.

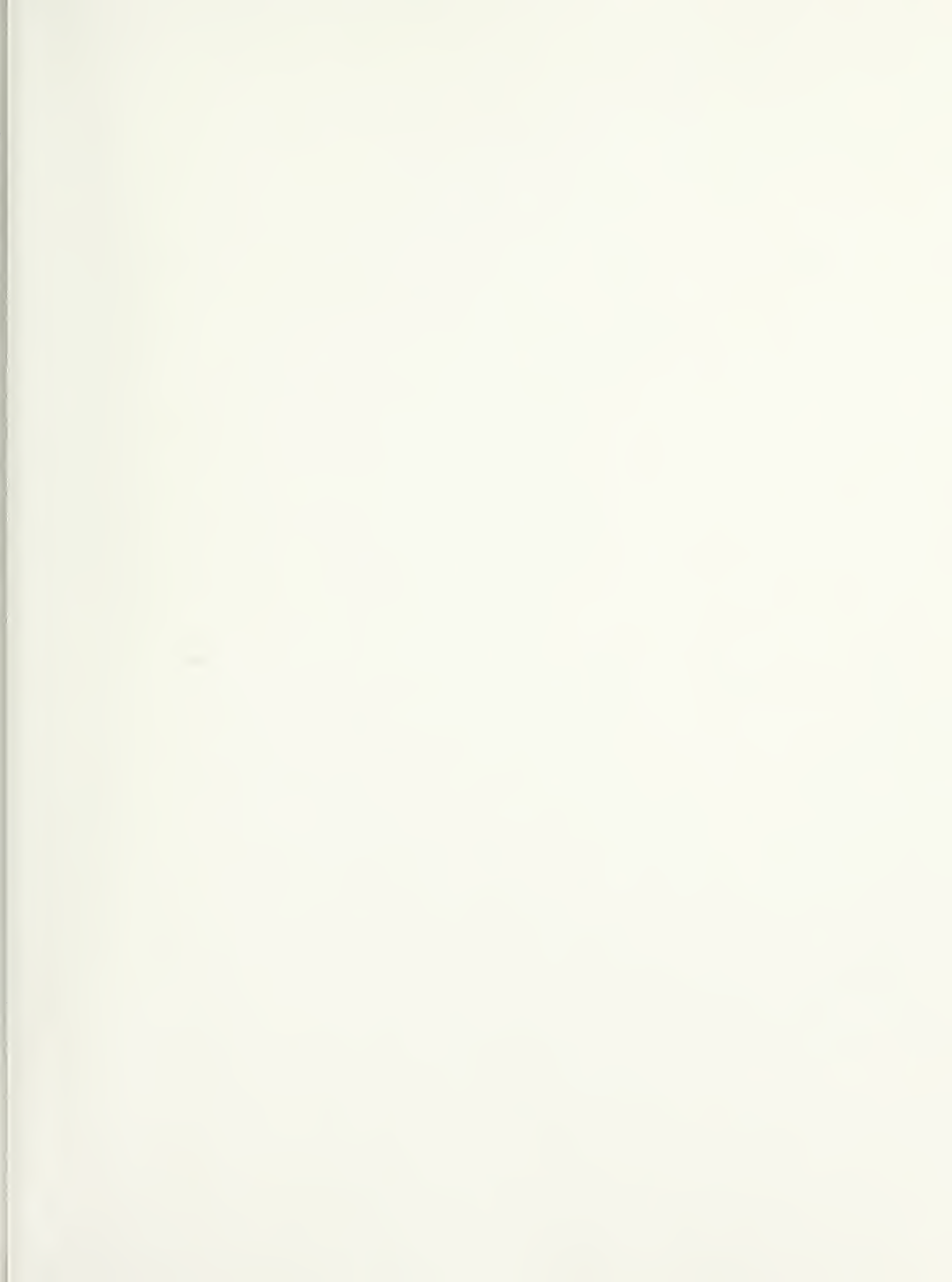
Sincerely,

Ardine Burgess, RN  
Utilization Review Coordinator







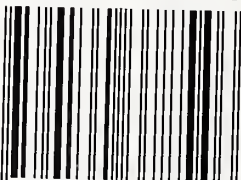


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